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A MANUAL

ON THE PROPAGATION
AND CULTIVATION OF

The PEONY

PUBLISHED BY PRACTICAL
PEONY GROWERS

Second Edition

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FIELD OF SEEDLING PEONIES OF F. O. BRAND, FAIRBAU, MINN.

HENRI MURGER

A PEONY MANUAL

Giving up-to-date information regarding these Beautiful Flowers.

Showing:—

How to Raise From Seed,
How to Increase by Divisions,
How to Plant and Cultivate.

This is designed to be a Complete Guide to the Florist and Amateur.

EDITED BY

C. S. HARRISON,

Author of "Phlox Manual" "The Evergreens," "The Gold Mine in the Front Yard."

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INTRODUCTION

The former edition of this manual was the first issued in any language. This was so cordially received that the 2,000 were soon exhausted. Some of the peony growers decided to issue another edition. Most of the matter is new. Many things have come up the past few years that need attention. This department of floriculture has made tremendous strides and we need to keep step with the progress. An interest unknown before has been awakened. New varieties are being produced, and hundreds are engaged in raising seedlings. The demand for these flowers is unprecedented. This work embodies much close observation and careful research, which we trust will be of benefit to the reader. What is needed is information. Thousands of people know little or nothing about the peony. Thousands have never seen one. The great west has passed the pioneer stage and is now thinking more of home adornment. They wish to know what to plant. One man in Minneapolis desired to improve his fine grounds. Incidentally he borrowed a manual, read it with interest, and sent for $150 worth, and now he is a champion of this queenly flower. Another gentleman read it and sent an order for $130 worth. Many a woman, with soul hungry for the beautiful, read it, and sent an order for some of the rarest. We are sure that that edition of 2,000 has awakened an interest which is spreading. The peony society, sometime in the future, contemplates issuing a work on the subject; but something is needed now, and so we give this, which we are sure will meet with cordial reception. What is needed is to push information into the great west, where these flowers are so much needed, and where they thrive and bloom so successfully. We have yet only touched the borders of the great work to be accomplished.

An Asiatic Queen

When perfumed June with cushioned sandals came
And threw her flowery mantle o'er the North—
As beautiful as at creation's birth—
And all the fields with color were a-gleam,
My pamper'd spirit dreamed, and this my dream:
From sunrise land a queenly form came forth
Bedecked with ample robes of untold worth,
Her gown with oriental dyes aflame.

So graceful and so perfect every line
She claimed my adoration from that hour;
So stately, and so large her queenly dower
I straightway bowed and worshiped at her shrine.

Awake, I walk along the peony rows,
A THOUSAND Eastern queens my garden shows.

—Eugene Secor, Forest City, Iowa.

CHAPTER I

Classification

We have spent much time in the endeavor to search out the original varieties of this flower. From the number we judge that there is yet great room for progress, and perhaps we have only just begun with our hybridizing. By permission I quote from J. W. Manning, in "American Gardening," of March 5th, for which I tender grateful acknowledgment:

"Until the forthcoming peony list of the American Peony Society is published, I believe quotation of variety names should be used with great care, and believe that the best interest may be served by giving the following list of species and their distinctive characters:

Peonia Albiflora, PALLAS. A Siberian species introduced about 1756, and one of the forerunners of the hybrid herbaceous forms, two to three feet high, with deep, rich green, often veined red leaflets, and bearing clusters of three or more very large, broad, overlapping petaled white to light pink single flowers, and showing globular masses of golden anthers in the center of each. June. Reevesiana, Fragrans, Whitleyi and Festiva show close affinity to this species.

Peonia Anomala, LINN. From Europe and Asia, with finely dissected, smooth foliage. Solitary, single, bright crimson flowers, and distinct in the large size of the petals and the peculiar compound, leaflike sepals. Two feet. May. Its varieties, Insignis, Peter Barr, Smoutti and Intermedia are now recognized, being more distinct in the character of foliage than otherwise.

Peonia Arietina, ANDERS. A tall South European species, distinct in the stems, being hairy toward the top; the foliage quite glaucus and downy beneath. The flowers are large, dark red and solitary, and the seed pods are prominently covered with hairs. The varieties range through shades of pink and red.

Peonia Browni, DOUGL. A Northwest American dwarf species, with glaucus foliage and dull, brownish-red flowers, borne on recurved stems.

Peonia Broteri, BOISS AND REUT. An early-blooming, European species, similar in foliage and habit to Peonia Officinalis, with red flowers varying to white.

Peonia Coccinea. A reported species in the Royal Botanical Gardens at Glasnevin.

Peonia Corallina, RETZ. Asia Minor. A vigorous species, two to three feet high, with dark green foliage, the lower leaves of which are only twice divided. Bright, crimson flowers, with short, rounded petals and seed vessels of a bright red color.

Peonia Coriacea. BOISS. Similar to Peonia Albiflora, with even broader leaflets, bright crimson flowers, purple stigmas and smooth seed vessels.

Peonia Corsica, SIEBER. Closely related to, if not the same as, the last.

Peonia Decora, ANDERS. From Southern Europe. A close species to Peonia Arietina, with peculiar horizontal foliage diminishing toward top of the stems, which are two to three feet high. The crimson flowers are small, with few narrow and small petals. Pallasii, with narrow leaflets, and Elatior, with broadly oblong leaflets, are recognized varieties.

Peonia Emodi, WALL. A Himalayan species, two to three feet high, closely related to Peonia Anomala, with smooth, finely cut foliage, pale beneath. Flowers pure white, borne in clusters of four or more.

Peonia Humilis, RETZ. A French species of low growth, with somewhat velvety foliage, and with bright red flowers on short stems, and borne in clusters of three or more, with smooth seed pods.

Peonia Lutea. Recently discovered species from Yunnan, and introduced by Abbe Delavay, growing about two feet high and bearing small, bright yellow flowers. The plant is somewhat shrubby in habit, and allied to Peonia Moutan. Not sufficiently tested as yet as to its hardihood.

Peonia Microcarpa, BOISS AND REUT. Closely allied to P. Humilis, with even dwarfer habit and more downy foliage. Presumably a native of France.

Peonia Mollis, ANDERS. A dwarf Siberian species, with dark green upper surface foliage, and distinctly glaucus and velvet below. Flowers pink or red, and borne singly.

Peonia Moutan, SIMS. The well-known Tree Peony, a native of China.

Peonia Officinalis, LINN. The oldest cultivated species, first grown in 1548, with dark green foliage above, pale green beneath, growing two to three feet high and producing single, dark crimson flowers, and with re-curved crimson stigmas. Early blooming, and a parent of many double anemone-flowered and semi-double varieties. A native of Europe.

Peonia Paradoxa, ANDERS. A very dwarf, almost tufted, Turkish species, with three-lobed incised foliage and purplish red flowers borne singly, and with seed vessels closely pressed together. There is a variety, Fimbriata, with double purple flowers and projecting purple stamens.

Peonia Peregrina, MILL. An European species, similar to Peonia Officinalis, but with very smooth, deep green foliage above, pale green, hairy beneath. Flowers bright crimson. This has given rise to two double forms and a number of varieties with single whorls of petals.

Peonia Obovata, MAXIM. A little known species, with "lower leaves not more than twice ternate; flowers large, red-purple, and glabrous seed vessels."

Peonia Pubens, SIMS. Allied to Peonia Arietina. Leaves hairy below, margins red.

Peonia Russi, BIVONI. A Sicilian and French species varying

from Peonia Corallina in decidedly hairy undersurface of foliage.

Peonia Sessiliflora, SIMS. Nearly related to Peonia Mollis; very low, flowers short-stemmed, pure white.

Peonia Triternata (Daurica), PALLAS. Three feet. Differs only from Peonia Corallina in the rounded leaves, greener stems and rose-colored flowers, A native of Caucasus.

Peonia Sibirica. A little known species in the Glasnevin Royal Botanic Garden list.

Peonia Tenuifolia, LINN. A Caucasus species eighteen inches high, with light, soft green, very finely divided foliage, and dark crimson, yellow anthered flowers and spirally recurved stigma. The earliest blooming species. There are double and semi-double types of this.

Peonia Wittmanniana, STEV. A Caucasian and north Persian species about two feet high, with coarsely divided dark green foliage, downy beneath and bearing showy, incurved, pale yellow flowers, one to a stem. Rare.

CHAPTER II

Propagation

It is highly important to know how to multiply these valuable flowers, for the process is slow at best.

You buy a choice Syringa or Philadelphus, and you can divide the roots and plant cuttings and increase them very rapidly. You can, in a few years, run a new kind of a fruit tree up into the millions, but you cannot rush the peony. One of the best on the list originated in 1850, and it is impossible now to supply the demand. If you raise from seed you never reproduce the original, and it takes from five to eight years to know what you are getting. But with care, by root division alone, you can secure from 500 to 1,000 in ten years. There are four modes of propagation; by division, from roots, from buds and from seeds.

We have a different system, when we raise for roots, than when we propagate for flowers. By the best of care on the richest ground you can hurry them considerably. But there is a great difference in them. L'Esperence and Victoria Tricolor multiply rapidly, while J. Discaisne, though a glorious flower, wants about four years to double itself. Others equally as good in bloom are much more profitable. From Baroness Schroeder, La Tulipe and Richardson's Rubra I have cut thirty roots in four years from one. By dividing every two or three years you have perfectly healthy and vigorous plants. I have bought those that must have stood twelve or fifteen years. The buds were partially decayed, and they had great, club-like roots. There is no advantage in such large roots. A two-year-old plant, sound and vigorous, is much to be preferred.

Propagation by Division

Here you have a task which requires much care and patience. At times it would seem as if you were playing a game of chess and were sure of being beaten by the peony. There is no class of plants which shows such a divergence in root formation. Some will have a very distinct cleavage, so that there is no trouble in dividing, and some you can pull apart without the aid of a knife; others grow to a solid mass. Some are very readily separated while young, but if left a few years they become so compact that they must be cut to pieces like a turnip. Take Richardson's Rubra Superba, one of the most vigorous kinds. If divided every two years you will be surprised at the result; perhaps you will get from three to six from one. But you let them stay for six or seven years and they become as solid as a squash, and the best you can do is to cut out a bud with a piece of root. Festiva Maxima, with good cultivation, will double every year. If left too long, however, it will have great club-like roots, half decayed near the buds. Most European growers divide every year or two and so keep the plants vigorous. There is such a thing, however, as cutting too fine, when they appear to get discouraged, and it takes years for them to recover. In Europe there is one trouble in dividing so often. They do not get to blooming before they are cut up again, and there is no chance to rogue them. Strays of other varieties will often get in. A careful grower can tell the aliens by the flowers and so weed them out. This is an important matter. But if they are cut up before they show what they are, as the rogues often multiply faster than the others, there will be very serious mixtures, as most of us who have imported know by unpleasant experience.

Three to Five Eyes

It is often the custom of purchasers to demand peonies with three to five eyes. In doing this they often get much smaller roots than if they said nothing about it. It is necessary to have a good root, regardless of the number of buds. We have received roots with this number that would not weigh more than two ounces, and it would take two or three years to attain bearing size. It is easy enough to load a small root with plenty of eyes, so much so that there will be too many stems for the root. Divide often, and your plant will run to buds.

We know one dealer who was putting up a robust lot of roots, and while packing received a supplementary despatch that they must have three to five eyes. Said he, "That lets me out," and he went and dug some very small roots of half the size, but they met the requirements, and the purchaser could say nothing.

In cutting up you will find some very peculiar. Instead of having roots that grow straight down they wind themselves around the neck of the plant like the arms of a child around a mother's neck.

Perhaps it will be a valuable sort. There is a little dirt on them, but you are sure that you can make it. You insert your knife, and lo, the buds fall on one side and the roots on the other. You try again and meet the same results. You are playing chess and the plant is beating you.

Again you find they are very brittle. A slight touch and they snap. You wonder what you will do. Don't do anything for awhile. Let those roots lie in the sun a few hours until they wilt and grow flexible. Now take this one so badly twisted. Gently lift that twining arm. At the upper end there is a bud; you want that bud and root to go together. Insert the knife under the root, lift it gently, now give a careful thrust, and you have root and bud ready for business. Look again. Here is another twisted one with an eye belonging to it, and with care you get five or six good ones with eyes attached. You feel better, for you are winning in the game, and perhaps each division means a dollar, so you can afford to be deliberate. It does not hurt them a particle to wilt a little. Put them in water and they soon resume their plumpness, or plant them in moist earth and they soon send out tiny rootlets. If you are packing, it is much better to have them a little flexible; they do not break so readily; only pack in moist material, and water well, and they will reach their destination in a plump condition.

For Commercial Purposes, the best way is to take a fair sized root not quite large enough to put into an order, plant it on good ground, and let it grow a year. It will increase its size about one-half. The knife wounds will be healed, and you have nearly a perfect root for your customer. Let it go entire, unless you can nip off a small bud with a root on it, which you can do without injury. I think such plants give the best satisfaction. They are healthy, and when planted make a vigorous growth. We cannot always do this, however, and so in most cases we send divisions.

CHAPTER III

Raising from Roots

I have watched this process closely for years, and have found one thing, perhaps not discovered by others. The root is small where it joins at the top; it swells in the center and then tapers. Now if a root is broken at the center, the lower portion never can form a head. It will try hard. A callus will be formed at either end. The poor thing will do its best to put a head on itself, but cannot make it. At the end of the first year the root will yet be sound; the second year the top will begin to decay, and the third year it will be rotten. The upper portion of the same root, where

it breaks from the plant, will have a good show for forming a head. Kinds differ. The Edulis Superba and others of its class are stored with vitality. I have often stripped off roots, like fingers from the hand, and planted them, and almost invariably a bud would form the first year and be ready for business the next spring. Sometimes it will take two years to form a head, but in the main you will succeed better to carefully divide and plant root and bud together.

Very often, in cutting up a large quantity, hundreds of roots will be left on the ground. You can gather these and put them in a bed, with the tops up, a layer of roots and a layer of earth. Cover with about two inches of earth. Some throw them promiscuously into a pit. In the fall you can overhaul them, and you will find many of them have thrown out a bud at the crown. These can be planted, and they will make quite a growth the next year. There are some exceptions to the general rule. Queen Victoria, and some other sorts, will form what are termed adventitious shoots, and produce buds from their lower portions.

The two kinds of Tenuifolia and Officinalis have roots like a sweet potato. The tubers are often separated from the parent stem. Place these in a bed by themselves, planted as directed above, and in about a year they will develop buds, and will be ready for planting.

When you are in great haste to multiply rare sorts you can take a large root, put it in moist earth and keep it warm, and in a short time it will develop a large amount of buds. Now is your chance to cut a bud with a fair portion of root attached. We have sometimes produced eight or ten plants from roots which, when first chosen, showed no indication of buds, save at the crown. Only some sorts can thus be treated.

Propagating from Buds

Considerable stir has been made about what is termed a new and rapid system of increasing plants. Having tested it, there is something in it, but whether enough to make it pay, is a question. Take off the top and bottom of a box eighteen inches deep, then put it over a strong clump and fill it with earth. The whole plant makes a desperate effort to climb to the sunlight. Both root and top show unwonted energy. In two years the stems will develop well defined buds. These you can cut off, with a piece of the stem, and plant in moist earth in a warm place. After awhile they will take root. At the same time an unusual amount will be formed at the crown. I have counted forty buds on a strong plant treated this way. I do not think plants developed from the stems will be as robust as those secured from divisions, and doubt whether we gain much by the process. The most rapid mode of production probably is to cut up every year or two and give the best of cultivation. Under such a process you multiply rapidly and have fine, healthy roots.

CHAPTER IV

Raising from Seeds

TESTIMONY OF AN EXPERT.

We are happy to introduce to our readers F. O. Brand, of Fairbault, Minn., who has had large experience in raising fruits and flowers from seed, and who has now probably some of the choicest peony seedlings on earth.

The Delight in Finding New Floral Gems

"It has been said that the most reasonable solution of the problem of our existence is that 'We find the possibilities of our capacity and our responsibility as beings conscious of a power of choice of directing our ways and applying our knowledge.' The originators of new and better creations in the floral world should be possessed with a consciousness of their own ability to materially assist in the development of superior and meritorious new creations, but they should also be slaves to that best of masters, Love for the object sought.

"An ever widening horizon of floral possibilities continually opens before us, and the lover of the new and beautiful is invited and attracted with an irresistible influence into the great unknown, into the unexplored realms where beautiful queens of the floral world are reigning supreme.

"Nature's liberality is increased by her repeated donations. Knowing this, we see no resting place, no achievement that can satisfy or cause us to believe that the best has been obtained.

Success in Raising Flowers from Seed

"In 1863 there were but few named varieties of peonies in cultivation. The fact that it takes from three to eight years from seed to get blossoms and then the small per cent. of really good ones has operated as a barrier to effort and prevented thousands from engaging in an undertaking that promised so little.

"Beginning the growing of nursery stock in 1867 here in Minnesota, I soon had a good collection of peonies. I was often disappointed because I did not get what I ordered. In one instance, in 1872, from a list of so-called fifteen varieties, there were but four kinds. In 1878 I began in earnest to make a large collection and at the end of the next ten years had fully 300 named varieties of the best I could secure in Europe and America. My main object was to secure seedlings. In this lot were fifty varieties from Mr. Terry. For several years they blossomed finely and in 1899 produced an

abundance of seed, which I saved and planted that fall. I plowed up a strawberry bed, which made a fine place for them. The seeds were planted five inches apart in rows two feet apart. In 1892 two plants blossomed, in 1903 about 125, in 1904 there were about 3,000, in 1905 and 1906 some very fine ones bloomed for the first time. Among these were some of our very best. It seems they had kept themselves in reserve in order to come forth in new glory and a fresh reinforcement of splendor. Certainly they are more than welcome at this late date. If the tardy ones, which are yet to show their colors, improve in the same proportion they will be gladly welcomed.

"Our success has been beyond our expectations. We have a much larger per cent. of really good ones than we had hoped for. We had one from Rubra Officinalis, and this was a duplicate of the parent. A person engaged in this work needs a large amount of patience and a willingness to wait long years for his reward. The satisfaction of knowing that you have been the means of adding to the world's beauty, brightness and happiness is of itself an imperishable reward. In this respect my success has been great."

"F. O. BRAND, Fairbault, Minn."

EXPERIENCE OF MR. GEORGE HOLLIS, OF SOUTH WEYMOUTH, MASS.

He says: "There is a fascination about the raising of peonies from seed, which does not attend the raising of common plants, for the reason that it is a process born of a long enduring enthusiasm; for to be a seedling producer requires patience and a belief in the final success of your work.

"You must learn to 'labor and to wait,' for the seed do not generally come until the second year. I suppose they are giving Nature time to fulfill her duty. They should be planted as soon as ripe, and the second spring the tiny shoots will appear. The little plant is only about four inches high, but it is an evidence of progress.

"See that the weeds do not choke them. Water them if the ground gets very dry, cultivate them thoroughly, and don't lose your enthusiasm, for the end is not yet. Take good care of them for three or four years, when the strongest ones and the single ones will be the first to open. They are all beautiful, but there are different degrees of beauty. The large, choice ones will come in the rear, anywhere from four to ten years.

"But if you are an enthusiast you will plant seeds every year and will constantly have plants in all stages of growth. BEAUTY'S MASK took the longest time to develop of any of my raising, while WELCOME GUEST was the first to win recognition. Then they have different degrees of height. I like the tall, robust and imposing ones like GEORGE WASHINGTON—not the dwarf growth of many. Then the style and size of bloom must be taken into consideration. This season, 1906, the judges granted me a certificate of merit on LOVELINESS and JULIA WARD HOWE, and I have many others waiting to be approved.

"Then the color must be clear and decided. LADY WHITE is a fine one. BUNKER HILL and JOHN HANCOCK are very desirable red ones, while LUCY E. HOLLIS and TWENTIETH CENTURY are pink. And what shall I say of GOLIATH and MAUD L. RICHARDSON, that have already received certificates? So you see that seedling raisers are not without hope of reward. So keep on with the good work and you will surely meet with success.

"Great care is necessary in selecting seeds if you wish for the best results. Those saved from full double ones, pollenated with others nearly as double, will give fewer seeds, but better results, and that is what you are working for. There will occasionally be one of Japanese form, one of those strange flowers blazing like a mid-day sun among the green foliage, waiting for us to do it homage. Two of these appeared in my this year's harvest of bloom, FLASHLIGHT and BOBBIE BEE. And thus will the procession pass, while wonder, praise and glory will fill the beholder."

"GEO. HOLLIS, SOUTH WEYMOUTH, MASS."

Supplementing these interesting experiences, I would say we are glad that attention is being paid to this important branch of horticulture. We depend too much on Europe, when we can do better ourselves. Peonies are the healthiest plants on earth, but in some way they manage to have them diseased, and we get some fearful specimens. Every American creator gives us absolutely healthy plants. Until recently very little attention was paid by us to the originating of new sorts. Now there are probably half a million on the way. Experts and amateurs are at it, and among those coming we will probably see some of the choicest yet produced. At the Boston peony show it was hard to find anything superior to some of Richardson's. His Grandiflora is a wonder, Milton Hill is a splendor. Mr. Terry has given us some fine ones. Rosenfield has produced two of superior merit and has others on the way. F. O. Brand, of Minnesota, has fine ones, and those of us who saw the productions of George Hollis were delighted with them. They were nearly, if not quite, equal to the choicest importations.

Seeds should be selected only from the best. Single and semi-double ones seed the most readily, while the great, full double ones rarely produce any. But when they do they should be saved with the greatest care. It was years before I could get any from La Tulipe, but I finally succeeded. The success of growers depends almost entirely on the seeds. "Like begets like," and instead of seeing how many we can produce, we need to see how the very best can be secured.

Only about one in a hundred, or perhaps one in a thousand, should be named. What shall we do with the thousands of rejected ones? It is a pity to throw them away. Don't do it. Did you ever see a really poor one? There is room for them. The great west and northwest need them. They can be used for planting in masses, in parks and private grounds. And as they will grow almost anywhere and under all conditions, there is many a barren or unsightly spot that might be made radiant by their smiles. Some

can go onto the bargain counter for those who insist that a "piny is a piny," anyway, and that is all there is to it.

I knew a florist abused by a lady because he charged her sixty cents for a fine one, when another florist sold peonies for twenty-five cents. If such a person could get one for ten cents she would hug herself in an ecstacy of delight.

There is a splendid future for this industry. When we look over the original varieties and see how they differ we are impressed with the fact that almost infinite changes are yet to be wrought. The unique Japanese have been successfully crossed. We have seen some with beautiful and delicate tasselated centers, with a satiny finish, as though the highest art had aided the most exquisite production of Nature.

Care of Seeds and Planting

The best way to gather them is just as they are turning brown, and plant immediately. If you put them in moist sand, intending to plant late in the fall, you will find many of them badly sprouted. Gathered just as they are turning, many of them will come up the next spring. If you wait till they are fully dried, by no known process can you make them germinate under two years. Not one out of fifty pounds ever came up before that time. We have tried soaking them in warm water before planting. Some were kept in moist sand till spring, and then the sand was sifted out and they were well nigh scalded and then soaked a long time, but nothing will move them. In the green house, efforts have been made to break the spell and induce them to come out before the time, but all in vain. They will leisurely take the two years, and some will wait three and four years before they appear.

Seeds may be planted thickly in rows two feet apart. You can let them remain till they bloom, or if too thick, move them and give them more space. All this takes time. When you originate new phloxes you can tell what you are doing within a year, but with peonies it will take from four to eight years. Do not be in a hurry. I have known rejected ones to make a splendid showing.

Some sorts are erratic and variable. Growers have called their productions one color, when, in after years, they have developed another. For instance, Terry describes Etta, one of his best, as bright dark rose. Now and for years it is light flesh, turning to pure white, a beautiful, late flower. You cannot always tell from the first blooms what the succeeding ones will be. Among my own I noticed one of exquisite beauty, richly variegated. A representative of the press who saw it said "Let me name it," and he called it Effulgent. I placed a stake there, with the name on it, and the next year that identical plant bore a large, coarse, single flower, and I never saw Effulgent since. There are many points we wish to secure in new varieties. We want fragrance, symmetry, beauty, prolific bloomers and willing propagators that understand multipli-

cation. I once had the finest crimson I ever saw. It was immense, a mass of splendor. The next year it had an inferior flower, and the next none at all. That was not satisfactory, yet that is the way with many fine sorts. You cannot depend on them. A grower once selected the finest in a thousand. It was very large and of a beautiful color. He divided and gave it the best of care and waited several years before he saw another bloom. By this time he had a dozen plants, and it took all of them to produce one flower, and that an inferior one.

Again we have the record of a plant that bloomed single for twenty years and then commenced giving double blooms.

The tiny seedlings are very hardy. They often make their appearance in the snow and slush of early spring and do not seem to mind freezing and thawing. As if to guard against dry weather, they throw down a tap root like a radish. When hot and dry, the tops will die down early in the season and you think they are dead. But the next spring they are on hand preparing to bore down deeper to be better fortified against the heat and drought. It is very interesting to watch the struggles of these tiny plants and note their victories. The writer is watching 50,000 of them.

CHAPTER V

Non-Blooming and Shy-Blooming Peonies

People often complain that, though they have taken the best of care of their plants and they are strong and vigorous, yet for five or six years they have never bloomed. I think we can divide them into three classes: THE INDOLENT, THE SENSITIVE and THE FREE-BLOOMING.

In many cases the plant will be healthy and vigorous enough, the stool growing larger every year; but never a bloom, or at least very seldom. These are the indolent, and make no returns for their board. Like some cows, you feed them for milk, and they turn it into fat; or, like a lazy man, willing enough to eat, but who don't like to work. This is constitutional. Throw them over the fence or put them on the bargain counter for that five cent woman who wants the very cheapest, and she will surely get it.

THE SENSITIVE ONES would do something, but they are in a cold and unfriendly world that does not appreciate them or their tastes and wishes. They cannot endure frosts and storms. They are so heartbroken over an untimely frost that they cannot even smile. Examine closely and you will find a tiny black ball where the bud ought to be, and that explains it all. Many a plant, if properly humored and protected, would reward you with splendid

blooms. As it is, they will do nothing till the conditions are favorable, and so they bloom once in three or four years. As a general thing, many of Kelway's varieties will have the sulks and refuse to blossom, on account of the conditions not suiting their case. They are like the Englishman coming from all the comforts of the old country, who cannot adapt himself to our frontiers and is always grumbling about "the blarsted country."

I make the following memorandum from many of his list:

Lady Curzon. No bloom in five years.

James Kelway. The same record.

Prince of Wales. One bloom in six years.

Mr. Brighton. No bloom.

Summer Day. Bloomed once, but had on a dress that did not belong to her.

Joan Seaton. Never a bloom.

Right beside these poor, dilettante, sensitive ones, was Terry's Prince of Wales, a robust plant, with glorious bloom. His St. Sophia was simply radiant in her beauty. These belong to the free-blooming list.

When you get a splendid variety that never fails and you can cut blooms from it every year, don't you see it is worth four times as much as a sensitive one that is often nipped in the bud?

Take the old popular sort known as L'Esperence, who thinks so much of the old soldiers she always wants to be present Decoration Day, and almost invariably gets there, bringing all her grace, fragrance and loveliness, and she is worth more than a dozen shrinking, sensitive kinds.

Golden Harvest is one of the very best all around sorts we have. Who ever knew it to fail? Reports come from Wyoming, the Dakotas and Manitoba of her cheerful blooming under the most adverse conditions. A brave and beautiful child of the prairies, always at her best, "glorying in tribulation," often blooming the first year and keeping it up ever after. That modest flower was born in 1890, and now the whole land is filled with her renown. Brother Rosenfield found a gem and didn't know it, putting them on the market at first at five dollars a hundred, when five dollars a root would have been nearer the thing.

You could pick scores of costly imported ones with fine names and glowing descriptions, with big prices attached, and this beautiful little maiden will surpass them all.

Grandiflora Rosea, Victoria Tricolor and many of Terry's are unfailing bloomers.

Floral Treasure is not as certain as Golden Harvest, and yet it had the grandest blooms after the worst untimely storm ever known in the west.

We must pick out these hardy and sure bloomers for the great northwest. It will not do to send everything into those cold regions. We must have the hardiest and most floriferous to send them that will proclaim the evangel of beauty to those bleak lands. My impression is that our most reliable ones must advance in price.

Growers should keep a stock of the hardiest and push these to the front.

Prices of the best peonies must advance also. It is impossible for Dessert, of France, to supply the demand. The best grades have gone up from three to five and even ten dollars. Mr. Hollis asks ten dollars for his best. But when you get a vigorous, healthy root which will make from 500 to 1,000 in ten years, really the first cost isn't much.

Mme. Emile Lemoine, one of the best of the French varieties, is $3.50. It is a vigorous plant, and is not high at that. When Baroness Schroeder went up to $5 a root a gentleman immediately ordered twelve, and was cut down to six, for which he paid $30, and he got a bargain at that, for with care the six will make 6,000 in ten years.

CHAPTER VI

Variations from Soil and Climate

These plants have their preferences of location and do much better in some places than in others. Some apples that do well in the east are worthless in the west. Many things that are favorites of one state are condemned in another. Though these flowers have a wide adaptation to all our northern states, yet some of them have their preferences. Charlemagne is highly spoken of in Rochester, N. Y., but is not a favorite in New England or Nebraska. Gigan-thea will do well in the east, but I never in five years secured a bloom from it. Mrs. Pleas sent out a glorious single peony which she claimed in Indiana had flowers nine inches across, but in six years I never got a bloom of any kind from it. Yet I could not doubt her word.

Peonies bloom earlier in Nebraska than in Massachusetts. In 1906, when the national show was held in Boston, we had an opportunity to see the same sorts bloom in both states. Invariably most kinds were of lighter color in the dryer air of Nebraska than in the moister air of Massachusetts. In the cooler air of Minnesota and Manitoba they have a deeper, richer color, on account of the cooler air, than 500 miles to the south. There is a great difference between the atmosphere of the Atlantic States, which carries 90 degrees of moisture, and that of the trans-Missouri states, which generally registers only 55 to 60, and yet this hardy flower thrives under both conditions. But it does not seem to prosper as well in the gulf states or in California.

Again, some seasons there will be striking variations. There are off years with flowers as with fruits. Some years the same

sorts will have inferior blossoms, and the next season they will be overwhelmed with beauty. The choicest, great, double ones have such full flowers that, like the viburnum sterilis, they cannot bear seed, and yet sometimes such full-orbed ones as Floral Treasure, Festiva Maxima and La Tulipe, will have smaller and thinner blooms, so they can in rare instances produce seeds. But this is at the expense of the flower.

A gentleman said to a florist, "This year I had such exquisite flowers from one of my varieties I wanted you to see them." The next year he was ashamed of them and did not call around for the florist. Generally La Tulipe is one of the most attractive flowers, but the summer of '06 I failed to find a good specimen, either in Nebraska or Massachusetts.

Be Patient with Peonies

A man bought a lot of Jeannie d' Arc of a responsible dealer. They bloomed the first year and he sent a most abusive letter to the grower, demanding his money back. The dealer refunded the money and the man kept both cash and roots. It is impossible for a full-orbed flower to come to its fullness the first year. A purchaser sent an angry letter to a dealer because Rubra Triumphans bloomed single the first year. He didn't buy singles, he wanted doubles, and nothing else. Now the ambitious plant, which is a ready bloomer, was anxious to do the best it could and so cut the coat according to the cloth. There was not material for a double one, and so it came single. Remember that the largest and grandest flowers like Richardson's late ones and Marechal Vaillant, cannot bloom the first year. It takes two or three years for them to do their best. It is so with the stately Shabona. In about four years it will be three to four feet tall, overlooking the whole field like a monarch of all. Such resplendent masses of beauty must have some capital and plenty of material for their dress parade.

So don't be impatient. You will get paid for waiting. We need to understand these plant idiosyncrasies so we will not judge too harshly.

CHAPTER VII

Diseases

Now, reader, don't be frightened. The peony is one of the hardiest and healthiest plants on earth. It will endure almost everything, and yet there is nothing which cannot be killed or injured. Out on a clean piece of ground you might have 500 kinds and grow them 25 years and never have any disease whatever

Couronne d' Or

Mrs. Mary Brand

among them. But there are certain places and conditions which sometimes affect them. We reiterate one great cause of disease is too much fresh manure. This they cannot endure.

CLUB FOOT.

This must not be confounded with the foreign fungoid disease, which we often import with rare sorts. Plant cabbage, for instance, on a piece of ground well enriched. Let one crop follow another four or five years and you have club foot in them. This can be remedied by a generous sprinkling of hard wood ashes. But it is better to grow some other crop a few years than to replant the same thing. With this disease the plants do not grow and bloom as you wish. There are no fibrous roots. The main ones may have grown a little and fed the plant by absorption. You dig them and they are a hard, sickly looking set. They are not smooth and clean. The ends of the roots are decayed. The sure remedy is to dig and divide, cutting off the diseased ends, and plant in good fresh soil which has had no manure for years. They will immediately rally and you will soon have fine, clean roots and healthy plants. Too much fresh manure is the cause of this.

SPOTTED LEAF.

This appears in August generally, and is the result of summer showers followed by hot sun before the leaves can dry. It is merely a scald. We have known one patch to be badly infected, while another of the same variety, out in the open, would not be affected at all, because there was a chance for the wind to dry the foliage before the sun came out. This, at the worst, is not serious, for it comes on at the time when the plants are going into a dormant condition.

THE RUST.

This results generally from the same cause and about the same time. The plants look bad. If the trouble should occur in June it would be serious, but as it comes on in August and September, no harm results from it. A field may be affected one year and be entirely free the next. Too much rain and little wind will cause it.

THE WILT, OR DROOPING DISEASE.

This comes on suddenly. The stems wilt and die down to the root. This may occur so early in the season as to injure the plant. In connection with this you will see a white fungoid growth about the root. The earth should be scraped away and fresh earth, with a little lime, should be placed around them. Then, as soon as you can do so, say the last of August, they should be taken up and planted in an open space on fresh ground. Cut off all the infected parts and you will soon have fine, fresh roots.

THE BLIGHT.

This is one degree beyond the wilt, and results from the same causes—too closely shut in and stagnant, poorly drained soil. The ground has been too highly manured and there is not sufficient ventilation. In this case the wilt goes down into the root and kills it. This trouble occurs with tender varieties. I have known the American born varieties to be strong and vigorous and bloom gloriously when many of Kelway's varieties would be utterly killed. It is part of the grower's business to find out which are the hardy and floriferous ones and push them to the front. The strong peony which thrives and blooms must have the preference over the poor, puny, sickly thing fading away by its side.

ROOT DECAY.

Some very vigorous sorts which grow and bloom splendidly, if allowed to stand four or five years, will show a good deal of decay, and perhaps the root will be only a hollow shell. The very robust Late Rose is often affected, and the kind known as Grandiflora Rubra, with others that seem robust and floriferous, will have this habit. It is not fatal, for if one part of the root is decayed, new portions form and the growth is kept up. This is remedied by digging and cutting them up rather close, compelling them to form new roots. In a year or two dig and divide again, cutting off all decayed parts. Thus you will have an entirely new and healthy root system. This method is better than large divisions of old roots, for in that case you retain more or less decay.

NEMATODES.

Sometimes you dig up your strongest plants and find the roots covered with nodules very much like those produced by bacteria on alfalfa. You are alarmed, for you have heard of the work of the root louse on young apple trees and you do not know but your whole ground will be affected. Don't worry. They are perfectly harmless. We often see them on the tallest and most vigorous plants. I have often picked out the most robust in the field and found these nodules on the rootlets. I have never known them to do the least harm. The mighty Shabona, strongest of all in 400, will have rootlets covered with them. Some kinds are affected when others are not. I do not think I ever dug or bought a Grandiflora Rosea, but what it was loaded. This is one of our most prolific bloomers. Beside it there may be another row not affected at all.

In cutting up roots we usually strip off the nodules. I don't know as it does any good, but they look better. You can easily get rid of them if you wish by the application of hard wood ashes and muriate and sulphate of potash. You can open a shallow furrow and sprinkle on the ashes, then with the hoe mix it well with the soil, and then plant. But I should not bother. I never saw any difficulty but once, and that was in a lot of old roots, for which they seemed to have an affinity. These I thought were a little damaged.

CELLAR BLIGHT.

Peony roots are the easiest things in the world to keep. Some will order in a lot from a distance, and if they are well packed will let them stay in the box for six months; and if they freeze, all the better, if not too severely, for it keeps them back, and they incline to grow at a very low temperature.

But you should have some care for your cellar. If it is close and has not been properly ventilated for years, you will find a white fungus in the earth, and this same fungus will fasten on your roots and they may be damaged, if not killed, that is, some of them. The summer before storing, your cellar should be well ventilated. The old earth should be taken out and that which is entirely fresh should be put in.

OUT DOOR WINTERING.

We have known of large quantities thrown into a heap like potatoes, where they seemed to heat, and many in the spring would be partially decayed. They should never be put in large piles.

The best way to store out of doors is to stand the roots right side up—a layer of them and then a layer of earth, and cover the whole with a foot of soil, and later, when the ground is frozen, throw some coarse manure over them. Of course it does not hurt to freeze them.

CHAPTER VIII

The Imported Fungoid Disease

Importers have found that many plants from France were seriously diseased. Most of those procured from Lemoine, one of the world's greatest propagators, were badly affected.

There is this peculiarity about this disease. While it clings like death to the infected root, it does not cross over to others. I have known rows so badly troubled they could neither grow nor bloom, and barely existed for three or four years, yet right beside them were those in perfect health, not at all affected. We see and know but little of it in the west; but in the fall of 1906 I procured twenty kinds from two leading growers in the east, and they were all affected. These were choice ones, imported from France. They were gnarled and knotted and had a sickly and uncanny look. They do have some fine ones over there, and we want them, and pay almost any price for them. Probably there is something in their mode of rapid propagation which makes them liable to disease. As they do not seem to affect each other probably the young plants are inoculated, and it stays with them. Of course on good, clean land, they will make some growth, but when divided the infection goes with them.

No Cause of Alarm

The average grower can live without these superfine ones. Should you ever get any, keep them by themselves and you need not fear contamination.

Patronize home growers that have good stocks. Dessert, one of the leading French propagators, seems to send for the most part healthy stock. But those badly affected have come not only from France, but also from Holland and England. Why take such risks when you can get just as good ones at home? Rosenfield, Richardson, Hollis, Terry and other American growers, raise vigorous and healthy plants, and some of them are as beautiful as their foreign rivals. Too many of us think an article is of little account unless it bears a foreign brand. But a good many foreigners, like Count Boni, are not worth the price paid for them.

I had supposed with others that this disease was produced by nematodes of a different kind from those that work in the rootlets. Specimens of diseased roots were sent to Amherst and the report came back that they were eel worms, caused from too much fresh manure, and that the winter would kill them, when the samples sent had endured several severe winters. I sent some to be planted on one of the bleak hills of Minnesota, to see what 40 below would do for them, but we were on the wrong track, as the accompanying letter will show, and this is from the highest authority in the land. I sent specimens of both kinds and asked Dr. Bessey to carefully note the difference between the external and internal nematodes. We give his answer:

UNITED STATES DEPARTMENT OF AGRICULTURE,
BUREAU OF PLANT INDUSTRY.
MIAMA, FLA., November 9, 1906.

MR. C. S. HARRISON, 829 York Avenue, York, Neb.

DEAR MR. HARRISON:—Your letter of November 3d, regarding diseased peonies, is at hand. I received the specimens of plants, diseased in two different ways, a few days ago. The one which you described as the harmless form of disease is the one caused by the nematode HETERODERA RADICICOLA, the ordinary root-knot nematode which is abundant in green houses in the north and on most cultivated plants in the south. I have observed it myself on over 200 species of plants, and have reports of its occurring on about 130 species more. This species is very destructive to many plants, but often causes no apparent injury to others. The latter seems to be the case with the peony.

The plants with the serious disease with the enlarged roots, much to my surprise, were found to contain no nematodes. The disease is apparently caused by some other organism, although, in many respects resembling injury due to nematodes.

I have planted out the roots and will make further study of the trouble. In case I find out the real cause, I will let you know at once. You see that I confirm the correctness of your observation that the two diseases were entirely different, although superficially they resemble one another. The only point of difference between us is that I find that the serious trouble is not due to any kind of nematode.

Very truly yours,
ERNEST A. BESSEY,
Pathologist in Charge, Subtropical Laboratory.

Thus we are compelled to drop the matter. Some of our foremost men are at work at it, and some remedy will yet be discovered. Some are using lime and sulphur; others lye. Carbolic acid

is being tried. If it proves to be a fungoid disease, then it would seem as if some kind of fungicide would reach the case. To prevent potato blight the seed is soaked in coperas water. Who knows but what this would be the thing? Doubtless when the society's manual comes out the knotty problem will be solved. We can go no further with it now.

We would suggest that if any are importing they insist on absolutely healthy stock, and if any are sent seriously affected, that they be rejected as unmerchantable stock, thus compelling foreign growers to stamp out the disease instead of transferring it to us.

CHAPTER IX

Preparing the Ground.

Peonies do best of course in good rich ground. If you follow a row over a clay hill and down through rich valley loam you will see the rankest growth and finest flowers in the deepest soil. The best success I ever had was on ground rich by nature and heavily coated with hen manure two years before so that by the time it was planted it was thoroughly incorporated in the soil so as to be a part of it.

There are more failures in using fresh manure in large quantities than from any other source. I knew one man who had a fair piece of ground on which his plants had done well, but he wanted them to do better, so he secured a large amount of fresh manure and mixed it with the soil, about half and half. It was a costly job involving much labor, but he was sure it would pay as he had heard that they were rank feeders and required rich soil.

He planted them and a sicklier lot of plants you never saw. The next year they were no better. He dug some of them up and they were club footed. They had no fine, fibrous roots, and what little growth they made was by absorption through the main roots. The ends were rotten. They had the dyspepsia and had it bad, and some of them died with the nausea of it.

They would have done far better with no fertilizing whatever, and, as the ground had been raising them several years, they should not have been planted there again for at least two or three years. An enthusiastic clergyman with a commendable zeal to do something outside his profession wrote: "I have just planted the peonies you sent. I first dug a trench and enriched it heavily. I planted them and put hen manure all around them and now I am looking for splendid results. I wrote him, "to take up every root before it is poisoned and set them on fresh ground which had received no fertilizing for two years; you will make an utter failure if you don't."

It is very natural to wish to do our very best, especially if we have costly plants. When I was beginning I knew the danger of

application to the roots, but as I had some dollar sorts I wished to hurry I put an inch or two of hen manure on the surface. In the spring I was surprised to see the plants thus treated had not started. Digging down I saw that all the ground seemed nauseated with the heavy dose and a white mould had gone down for six inches and the peony roots were wrapped up in a white mantle of it. I dug them all up and planted in good ground which had never been fertilized in any way and they recovered and made a fine growth. If I had left them probably every one would have died.

So in the preparation of the ground be sensible about it and don't overdo it. We notice that in New England they do very well on poor soil to which a heavy coat of swamp muck has been applied, and even where the soil is light, experts are careful to avoid too heavy a coat of stable manure.

In planting for flowers you can enrich heavily; take a strong pair of horses put the plow down beam deep, then let down the clevis and throw another furrow out of the first, thus stirring the soil eighteen inches deep. You can raise a crop of potatoes and work the ground well and in two years plant your peonies. Or you can dig a trench two or three feet deep and put six inches of cow manure in the bottom and earth on top of this. By the time the roots get down to this reserve it will be well rotted and in condition to furnish strong plants and fine flowers.

For growing roots for the market some dealers, after two years, will cut them up, sell the largest and put the smallest back in the same row to save the danger of mixing. This may do once but never should be tried twice. Ordinarily peonies should not be planted on the same ground, for two reasons. First, you do not plant potatoes on the same ground continuously. You prefer to rotate, and these plants do much better on fresh ground. Then some roots will be left and in a year or two they will come up and give you bad mixtures, and above all things we must keep our varieties separate.

We have found it to be an excellent plan to plant in fairly good soil in September, and in early winter cover the whole ground with four inches of coarse manure and spade this in the next spring, or let it lie and rot and work it in with the cultivator. This enriches the ground and feeds the plants without surfeiting. And when it rains in the growing season it is like watering with liquid manure. The rich coating does not come in direct contact with the roots.

Planting.

Be careful not to break the bud. Insert the spade, make a hole to fit the root; insert that. Have the bud two to three inches below the surface, pack the earth firmly around it. In this way a man can plant from 1,000 to 2,000 in a day. If the root is long you need not dig full depth for it. Incline it at an angle of 45 degrees. Be careful always to cover the bud well. Some men plow a furrow

with a heavy team, set up the plants along the edge of it and throw another furrow on them, and plant every third furrow. This may do for cheap kinds, but not for first-class ones.

CHAPTER X

How to Cripple the Peony Business

In the neighborhood of many of our large cities there will be some peony growers who think they must sell their blooms for any price they can get. Of course they wish to sell the roots, but never stop to think what effect cheap flowers will have on the market for them. They will rush into town and even underbid themselves to get rid of the flowers at any price. Some growers have sold blooms as low as 50 cents per 100. A case comes to us of a man who sold his crop to a Greek florist for 75 cents per 100, and HE sold them for 75 cents per dozen. Sometimes growers will force down the prices so that department stores will retail them at a cent apiece. How is a man going to sell the roots when he has simply ruined the whole business by cheapening them? Suppose you have some very choice kinds like Mme. Emile Lemoine, Baroness Schroeder, Madam d' Vernville or Ville d' Nancy, worth from $1.00 to $5.00 a root; how are you going to sell them when the would-be purchaser will laugh in your face and say "I can buy all the piny blooms I want for a cent apiece?" If a farmer wants to sell a fat steer for $50, he don't put the price of dressed beef down to $5 per 100 and tallow to two cents a pound.

Flowers fit for market should never be sold for less than two and a half to three cents each. It doesn't pay to handle them for less than that. Flood the market with cheap flowers and you will have a lot of very cheap roots on hand.

What shall we do with our flowers then? Let them alone! Do not use them to ruin your business. Hold up the price and you will only need to sell half as many. Keep them for your neighbors to look at. I have known people to go 200 miles to see a field in full bloom, and it paid. There is not a more gorgeous display on this earth than a large field of them in the full splendor of their beauty. Plant your grounds for

A Public Park

You will probably need a good wire fence around it, but people can come and see them just as well. It is astonishing how much enthusiasm such a spectacle as 50,000 blooms will awaken. Electric cars will be crowded with people going to see them. A procession of carriages bearing delighted spectators will be there. And as they see the glory and sniff the delicious fragrance the very air will be

thick with expressions of delight. Then you can sell peonies. People can go in, pick out their favorites and leave their orders. In the east we have seen roads lined with autos going fifty miles to a gorgeous peony show, off in the country. Such a garden becomes a Mecca, and you see pilgrims hurry to it from all directions. The best sales are often made from these fields of splendor. Leave them to come to the fullness of their beauty and you will fill your own soul with a delightful enthusiasm and have more confidence in yourself and in your productions. You will not be on the borders of uncertainty. If you have agents in the field call them in and have them spend days imbibing the loveliness, gaining knowledge also, so that they can give the facts to your customers. Having seen them in all their beauty, they can sell much better than if they simply read descriptions from the catalogue.

It is strange that any grower can be so short-sighted. He raises peonies to sell and then proceeds to beat down the price of the roots to the lowest notch. What is a plant worth that can bring only a one cent flower?

Peony blooms of the best sorts are the finest flowers on earth. The late James Hartshorn wrote us that he was selling flowers of the Festiva Maxima for $3.00 per dozen, and they were worth it. And so are other choice ones. Florists should aid the growers in making a distinction between the common and the finer sorts. They should never be put on a level. Above all, though, never sell these blooms of any variety as if they were only a lot of weeds.

Twenty-Four Best Sorts

Some one in Florists' Review called for the names of two dozen of the best varieties for cut flowers. The replies show a difference in taste and probably also a difference in soil and climate.

PEONIES FOR CUT FLOWERS.

Please give us a list of twenty-four varieties of the best peonies for cut flower purposes. I have never grown such, and would like to know the names of some specialists where the roots can be had in quantities. E. T. B., Indiana.

To obtain a list of the best varieties of peonies for cut flower purposes, the best thing to do would be to correspond with some of the dealers. In growing peonies for cut flowers we would certainly not recommend that such a large number be used; five or six kinds grown in quantity would be far better than twenty-four varieties, a few of each kind.

We cannot give a list of more than fourteen varieties of peonies which we would recommend for cut flower purposes out of the list we are now growing. We have many varieties, but they have not been sufficiently tested as yet. The list is as follows: Amabilis Grandiflora, white, very large, double, fringed petals, fine, very sweet; Caroline Mather, purple crimson, large, double and very

dark; Delicatissima, rose, large, full, fine, sweet; Duchesse de Nemours, rose-pink, very large, double, sweet, one of the best; Elegans, outside petals dark pink, large salmon center, loose, fine, sweet; Festiva Maxima, creamy white with small center of carmine, round, early, in clusters, sweet; Francoise Ortegat, dark purple crimson, very large, fine, deep, double, and sweet; Fulgida, very dark crimson, good; Humei, rose, full, large, late, one of the best; La France, pink outside petals, with yellowish center, very fine; Perfection, outside petals rose lilac, inside salmon, sweet; Reine Hortense, pink, large, full globular, fine, fragrant; Triumph du Nord, violet rose, lilac shade; Victoria, rose, center yellowish.

W. & T. Smith Company,
Geneva, N. Y.

Regarding a list of twenty-four varieties of peonies which we consider best for cut flower purposes, we are pleased to name you the following list: Achillea, blush white, early; Alba Sulphurea, white, late; Alexander Dumas, pink and salmon; Beaute Francaise, flesh pink; Charles Verdier, lilaceous pink; Couronne d'Or, white; Delachei, purple crimson; Duke of Wellington, sulphur white; Duchesse de Nemours (Calot), white; Duchesse de Nemours (Guerin), pink, early; Festiva, white, early; Festiva Maxima, white, early; Humei Carnea, pink, late; Louis Van Houtte, crimson, late; Mme. Breon, rosy flesh white, early; Mme. Forel, pink, late; Nec Plus Ultra, pink; Mme. Coste, tender rose and white; Queen Victoria, flesh white; Jennie Lind, pink, early; Lady Bramwell, pink; Officinalis Rubra fl. pl., crimson, earliest; Officinalis Rosea Superba, rose pink, early; Rubra Triumphans, crimson, early.

Cottage Gardens Co.

We herewith submit a list of twenty-four varieties of peonies for cut flower purposes arranged in their several colors. We have taken into consideration the various times of blooming, keeping qualities, fragrance, size of flower, and strong stems, in making this selection:

White—Festiva Maxima, Queen Victoria, M. Dupont, Couronne d'Or, Madam Crousse, La Tulipe, Madame de Verneville, Marie Lemoine, Duchess de Nemours.

Pink—Beaute Francaise, Delicatissima, Livingstone, Princess Beatrice, M. Jules Elie, Edulis Superba, Alexandrina.

Red—Adolph Rosseau, Souvenir de l'Exposition Universelle, Modeste Guerin, Delachei, Marechal de MacMahon, M. Krelage, Richardson's Rubra Superba, Felix Crousse.

Peterson Nursery.

Of course tastes differ. With me the two very best are Baroness Schroeder and Golden Harvest. In the west we need different kinds from those required in the east. Most of Kelway's are of little account out here; we need something strong and robust that will endure heat and drought. I might have mentioned some of Terry's, which are of especial merit on account of robustness, hardiness and beauty. His Etta, Victor, Morning Star, Prince of Wales, Bell Hough, Sada Evans and Cynthia stand well at the head.

Here is my list of the best 24 varieties of peonies for cut flowers: Baroness Schroeder, Festiva Maxima, Golden Harvest, Madam de Verneville, Duke of Dorchester, Belle de Nancy, Mt. Blanc, Couronne d'Or, Pottsii Alba, Livingstone, M. Geissler, Madame Emil Lemoine, Floral Treasure, Richardson's Grandiflora, Richardson's Rubra Superba, La Tulipe, Marie Crousse, Modeste Guerin, Marie Lemoine, Mons. Dupont, Prince Imperial, Sunbeam, Louis Van Houtte, L'Esperence. C. S. HARRISON.

CHAPTER XI

Peonies as Cut Flowers

While these are the grandest flowers for out-door display, some of them are without rivals for decoration. Cut just as the buds are opening, they will keep a long time, a week or more, though some kinds will keep longer than others. The usual way is to cut them and put them in water immediately, so they cannot wilt. Flowers suitable for cutting should have long, strong stems which will hold the flower well up without drooping. Some, of wondrous beauty, like Terry's General Grant, are defective in stems, those of this kind being often of a Z shape, so it is impossible to use them only with a short stem. Many a gorgeous beauty must take a second place for lack of a strong support. It is well to change the water at least once a day. When this is done cut off a portion of the stem; some make a slit in the end to give the water a better chance at more surface.

For Shipping

The following course is generally taken: The plants are cut at night, just as the buds are opening. They are then put in a tub of water. The bottom leaves are stripped off, as they would rot under water. In the morning they are carefully packed in a paper-lined box. We often put them in bundles of twenty or so, and bind the stems in moss and wrap them in paper. The tops should be lightly wrapped also; waxed paper is generally used. They seem to keep better this way than when packed without the moss. This process, however, has its limitations. It seems impossible to keep them in transit over 48 hours.

At the Chicago and Boston expositions we watched matters closely. Some were sent from New York. They had been in cold storage first. But they did not come out in good shape. They had a bedraggled look. They can be kept in cold storage for a long

time, provided the air is dry. If it is moist, the petals will fall. If the conditions are right, Richardson's Grandiflora Rubra, one of the latest and grandest, can be kept for three weeks. Put in just before opening, it lies dormant in the cold, and when placed in a warm room it immediately opens in all its glory and retains its form and beauty for several days.

Hitherto there seems to have been a limit in shipping. We asked the president, C. W. Ward, if he knew any mode of packing by which they could take a journey requiring over 48 hours, and he said he did not. This is from one of the foremost florists of the country, and it seemed too bad.

We have shipped several hundred miles, packing with the greatest care. One shipment, which required three days, was half useless and had to be thrown away.

Another Process

S. B. Stewart, of Omaha, gives this experience: While at work for a florist years ago an employe cut some lilies and carelessly left them on the bench over night. When the proprietor saw them lying there sadly wilted he was very indignant. Mr. Stewart told him not to give up. He cut off a portion of the stems, put them in warm water, and immediately they revived. Then he commenced treating other flowers in the same way. His directions are these: The petals of a flower in bloom are tender; they break readily. Let them wilt until they will bend without breaking. Ship them in this wilted condition. Said he, "They can be shipped to California." When they reach their destination, cut off a small portion of the stem and put them in warm water. It is astonishing how soon they will revive.

Mr. Stewart was in the habit of going over to Father Terry's to get peonies for his store. The old man was anxious for him to keep them from wilting. "Never mind," he would say, and he always took them the twelve miles in his wagon without any water whatever. Then on his arrival he would restore them.

Those of us who were at the Boston show will remember a lot of Richardson's Rubra Superba that came from Cincinnati and had been a long time on the way. They were badly wilted, and we shook our heads. But they were immediately plunged into water, when they revived and took the first prize over the home-grown ones. So here is a point we must not forget. There is certainly something in it.

Forcing Peonies

The question often comes up "Can we in any way crowd these

along so that we can enjoy them on Easter?" This is often done. You can do it if you have the proper conditions.

We are glad to give here directions furnished by Fred W. Timme, in Florists' Exchange:

"As long as the crops of flowers from open air peony fields can readily be sold at good prices, no matter when they come, florists will not be over-anxious to go into peony forcing under glass. But every now and then an inquiry as to how it is done, and whether or not it pays, comes from parties who evidently seem to be under the impression that the forcing of peonies as a money-making venture has escaped consideration, has been overlooked by growers in search of something new and eminently profitable. No fear of that; it has been tried here and there, on and off, extensively and otherwise; and the fact that peonies can successfully be forced has been fully established; but whether it will ever grant a margin of profit above that assured by outdoor culture has yet to be learned.

"Peonies, like most hardy plants, and more so than many, suffer a severe set-back by being forced. It takes them years to overcome the consequences of the unnatural ordeal. This is especially true with the Moutan and Arborea varieties, just those best suited for forcing and the only kinds good for pot culture. These are potted up early in the spring, better yet in the preceding fall, are grown on in their pots during summer outdoors, ripened off in the fall and forced out in the latter part of winter, beginning with 45 or 50 degrees in January or February. After a good set of buds has been secured, the temperature may gradually be raised to 60 degrees. These plants will be in bloom quite early in the spring, probably at Easter, but after that will not be fit for forcing for several years, and must regain their strength in open field culture. In like manner the Japanese single-flowered varieties, very showy and fine for conservatory display, are handled. Of course, where the actual loss of plants by forcing is a matter of small concern, severe forcing of well-established plants may be practiced with good results, and flowers be had in mid-winter, even at Christmas.

"Of herbaceous kinds none but the early varieties yield to real forcing, and then only under moderate heat and slow movement. The double, and especially the single-flowered Peonia Tenuifolia comes early, and plants of these, established in solid ground, cause little difficulty. The foliage is fine, and the flowers are of a rich, glowing color; but they do not last long, and sell no better than dahlias, which are raised with less expense. The varieties of Peonia Officinalis force easily enough, and come earliest of any; but the plants take up much room, are straggling and bulky, and then the flowers are so far from being anything especially alluring to buyers that it seems wiser to leave peonies of this type out of doors, where they belong. A whole field of tree or herbaceous peonies of some good early sorts may be had in bud and bloom from three to four weeks earlier than their ordinary flowering season, by erecting a portable sash house over them. No artificial heat is required in bringing them into bloom. This could be repeated for two or three

seasons without weakening the plants to any great extent. But then, in doing so, the northern grower would not be greatly ahead of his southern competitor, whose cut reaches our central markets about three weeks before the great bulk of the season's output is harvested. FRED W. TIMME."

This business is in its infancy. We have tried it ourselves enough to know that there is something in it. We suggest that the most prolific bloomers be used, like L'Esperence, Golden Harvest, Baroness Schroeder, and those of that class which are always ready to bloom on the least provocation.

The process requires some care and patience. We would suggest a plan for outdoor forcing, which can be readily used: Take early blooming sorts, plant on ground properly prepared; set a foot apart each way, so as to have them take as little space as possible; build a pen around them and cover the top with good, strong cotton cloth, which is much cheaper than glass. You will be surprised at the heat which will gather under cover. Your plants will come on with a bound and you will have flowers much earlier than if grown in the open. Almost the sole objection to peonies is that they bloom only a short time, when, if properly cared for, as we show elsewhere, we can enjoy them for months. By forcing, by planting early and late varieties, and by other methods mentioned in this manual, we can have their companionship a long time.

CHAPTER XII

The following tributes are from the Great Northwest:

U. S. EXPERIMENT STATION, BROOKINGS, S. D.

MR. C. S. HARRISON.

Dear Sir: I was glad to receive your letter and to learn that you are doing so much in ornamentals. In bulletin 72 I have mentioned my experience with the peony. The following note may serve your purpose: The Tree Peonies are tender, and winter kill in the northwest, but the Herbaceous Peonies are perfectly hardy in South Dakota without winter protection. We have many varieties under cultivation here, and all appear hardy, and flower profusely. Of all herbaceous plants the Herbaceous Peony should be the first one to plant in the garden of every dweller on the northwestern prairies. They are as hardy as pie plant, and do well with no more care than that given to pie plant. It pays to manure both plants for the best results. The number of cultivated varieties of peonies runs up to a thousand or more, and the list is continually being increased by the raising of new varieties from seed. This will be an interesting line of work for the amateur, as he may obtain varieties superior, or at least equal to, any of the many sorts now grown by nurserymen and florists, but the planter who wants a sure thing will prefer to plant named sorts. The peony is steadily gaining favor with florists all over the country, and some plant them by the acre for the purpose of growing flowers in quantities for market. Some people call the peony the "King of Flowers," but this title is probably claimed by many other flowers, each one having its devoted adherents.

Yours truly,

PROF. N. E. HANSEN.

Brandon, Manitoba.

Mr. C. S. Harrison.

Dear Sir: Your letter of December 24th received. The Herbaceous Peonies are doing exceedingly well here. Our collection is a small one, but we find no difficulty whatever in wintering them, even without protection. We simply keep them free from grass and weeds, and let nature do the rest. In my opinion, they are by far the best perennial for cultivation in this northern climate. Some of our plants have as many as sixty bunches of blossoms. I am looking forward to the time when we will have a complete collection of this beautiful flower here. If at any time you wish me to test a root or so, I shall be glad to do so. I shall try and send you a cut showing some of the peonies growing here. We are getting a very large immigration from the United States to this country, and you can tell your people to bring the peony roots along with them, as they grow well all over Manitoba and the northwest. We do not even mulch or manure our plants. The soil is rich, and the snow, though not deep, is sufficient for protection. Yours,

S. A. Bedford.

This testimony is also substantiated by Dr. William Saunders, general superintendent of all the experiment stations. I have been sending some to Assiniboia, a province of northwest Canada, where they also do well. A friend told me of an article he saw concerning their successful growth in Alaska. So, when we have flowers called for from Mobile to the Arctic circle, we need not fear we will overstock the market right away.

It is surely a matter of encouragement that the vast empire of the great northwest, reaching beyond our own bleak prairies up through Canada to the Arctic circle, is the very paradise for the finest flower that blooms.

We have scores of letters from various portions of these extensive regions and all speak in the highest praise of this favorite flower. Orders for them grow more and more numerous every year. It is a source of delight that these queenly flowers willingly take up their abode in the very bleakest portions of these vast domains, and a few roots soon grow into strong clumps which are packed and crowded with masses of beauty.

Our Peony Society should use every means to disseminate a knowledge of these heroic flowers.

CHAPTER XIII

The Hardiness of the Peony

We know of nothing in this world which has the vigor and hardiness of this plant. The root is like the grip-sack of the traveler which contains the supplies for his journey. It will come to us from Europe and bring in compact form foliage, flower and life. We know of nothing that will stand more hard treatment, exposure and neglect. It may be left on the ground, exposed to the sun, for days,

and be badly withered, and yet it will revive and grow. Often we find, where we have cut up plants in the fall, that tiny buds, so small as to escape notice, after freezing and thawing all winter, will throw out shoots and tiny rootlets, and we have often saved them. One spring two roots of La Tulipe were left in the barn two months, till, to all appearance they were dead. They were planted the first of June, and they immediately revived and grew.

One winter we had several boxes stored in a root cellar. They were poorly packed. Someone left the door open and they were all frozen solid. The door was closed, and they remained frozen till spring, when they were planted, without the loss of one. It is no uncommon thing to keep a lot in boxes seven months at a time with but slight packing. I once had a remarkable experience with a lot from Kelway, England. They came over in reasonable time, but were delayed in a warm office at Lincoln, Neb., a month before I was notified. The box was dried out and full of cracks, and the moss was dry as powder. The roots were black, and snapped like sticks. The buds were shriveled. I had the expressman look them over, and all pronounced them dead. There were thirty roots, some of which cost $2.50 each. Of course the express company had to pay damages. Taking them home about the first of November, I cut off the dead roots and planted the buds in moist earth in a box in the cellar. At the end of a month the buds began to swell. December 1st, they were planted out, and were frozen all winter. They all grew but one, and one of them bloomed. Of course it took an extra year to form new roots. They seemed much like the Mexican resurrection plant.

They are like the Rocky Mountain burrow that bears any amount of misuse or neglect, and yet patiently plods along. Often for years they must bear neglect in grass, or the hard earth trampled solid about them. And yet they hang on, doing the best they can. Yet while they patiently endure so much, there is nothing that responds with more grateful alacrity to generous treatment. A neighbor had an Alba Sulphuria, which had bloomed in utter neglect for 25 years. I bought the clump, he retaining a couple of roots. He planted his in the grass and hard earth, digging but a little space for them. In four years they have not bloomed or grown. They could not. They could only live. I planted my part in the richest ground, and how they increased and blossomed. In about four years I had nearly one hundred plants. We have cut up clumps that stood in sod nearly 25 years, the roots of which were so badly decayed they could not bloom. By planting the buds with only a little root attached, we soon had fine, healthy plants.

CHAPTER XIV

Thoroughbred Live Stock and Thoroughbred Flowers

I used to keep thoroughbred Jerseys and Shorthorns. Though I enjoyed it they were a constant care. One night I was awakened

by a fearful crash. I wakened the boys and told them to bring the lanterns. Rushing out, I saw in the barn two balls of fire. They belonged to the Shorthorn. He weighed a ton and every pound of him was in fighting trim. Aiming a pitchfork a suitable distance below those blazing orbs, I caught him in the nose. Then the lights came. We secured him and led him back to his stall. It seemed the Jersey got loose and thought it a good time to take revenge. The Shorthorn tore himself loose, drove the Jersey back to his stall, and with one tremendous thrust, hurled him through the side of the barn. I was younger then, but I don't want any more. With peonies you know where they are nights. They do not tear themselves in wire fences. They do not eat their heads off in winter. The food costs nothing. You can go off on your summer vacation, and they will be there when you come back. They multiply as fast as live stock. There is more money in them, legitimate, honest gain. Sixteen years ago a man laid out $50 for choice strains. For some time he has been selling $1,000 worth a year.

I bought a fine plant for $1. In five years I sold $18 worth, and had eighteen roots left, One choice variety in the same length of time brought in $34.00, and I had fifteen roots left. One fall I had an order for 500 common mixed sorts for $6 per 100. It took but a small piece of ground to furnish them. My man, who had worked on the farm, was astonished. "Here," said he, "we have dug $30 from a few rods of ground, and if we got that from two acres of farm land we would do well."

Is peony raising a fad, that will soon pass away? It cannot pass; people will not allow it. In staid old Europe the interest has fairly commenced. In our eastern states, where they can raise azalias, kalmias and rhododendrons, the demand is on the increase. Most of the stock of western growers yet goes east. In the west we cannot raise the flowers above mentioned. They will have nothing to do with us. They are aristocratic easterners that will die before they will live with us. I thought our hot suns and drying winds too much, so I got 1,000 of the hardiest kinds I could hear of, and put them under a screen. Kalmias, azalias, rhododendrons, all dead in a year, despite the tenderest care. Do you wonder that we love a flower that will step in and take their places, one that never grumbles nor pines, and is never homesick, that is more fragrant and lovely than the best of them? I have attended some of the most famous flower shows of the east, and here in Nebraska we can raise as fine peonies as anywhere on earth. We plant roses, and they kill down and dwindle away, but the peony stays by us. Millions are needed for our western states. Billions are needed for the Dakotas, Minnesota and Manitoba, where they do as well as in England. When the finest flowers on earth are fitted for such a vast empire, and they will grow and thrive where other things will not, you can depend on them.

Talk about ginseng for profit! Go to raising peonies. This is work for ladies. Already many are going into it. There is much

L' Esperence

less care and expense than in raising chickens, though as light work the two go together. The hen is mightier than the sword. She seems insignificant, yet her produce and progeny every year are greater than the output of all the gold mines, and the more eggs and chickens you raise, the higher they get. The two enterprises are in woman's realm. Mrs. Pleas, of Indiana, has raised some fine new sorts. One she sold for $100, and another for $150, besides having thousands of dollars' worth of enjoyment from her floral friends.

When you take into consideration the growing value of cut flowers, you have three harvests from your peony bed, one in spring, the blossoms in summer, and again root sales in the autumn. The delightful and profitable employment, together with the fascination of raising new kinds from seed, will give a zest and joy to living which cannot be found in any indoor employment. There is the delight of seeing a transformation going on, the brown earth putting on robes of beauty while you are culling forms of loveliness out of the unseen, taking the rainbow and moulding into shapes of wondrous fascination.

In Planting, the Condition of the Bud Must Be Taken Into Account.

This is very important. The peony usually goes into a dormant condition about the middle of August. I have had excellent success in planting at that time, for the buds that form for next spring are small and tough, and they can be handled without danger of injuring them. As a general thing, however, September is the best time, for if very hot in August it will not do to ship. If packed too moist they might rot. When planted at this time little rootlets begin to grow and the plant is all ready for its spring growth. You will notice that those left in the ground and apparently dormant are making a fine growth of fibrous rootlets, and the longer they are left the more numerous they will be. The buds are growing too, and often old roots will have a net of rootlets around them, and the buds will be much larger and more liable to damage than if planted earlier. Of course peonies can be planted any time from the first of September till the middle of the following May. But we are speaking of the BEST TIME. I have often planted strong, left over roots from the first to the middle of May, and if the ground is rich and in the best condition, have cut good crops of flowers from them a few weeks after planting.

By the middle of August the bud is short and tough, but it begins to grow a little in September and keeps it up till frost. If the fall is warm it has made considerable growth by the middle of November. It is then much more tender and snaps more readily. Then in the spring they start very early and the buds are more tender still, and as they grow it is more difficult to handle them.

It is very trying to the grower for orders to come when his plants are six inches high, as is often the case. Moving at this time

shocks them. When peonies are needed for the spring it is better to dig in the fall and keep them dormant until sold or planted.

How to Keep Them Back in the Spring

We do not all have cold storage, and unless very cold they will start if kept moist at a low temperature. A little freezing does not hurt them. I prefer to have mine down as near the freezing point as possible. When spring opens, instead of packing in wet moss, keep them cool and dry. Even if wilted, it will not hurt them. By putting them in water or moist earth they are immediately restored. One spring I received a lot from France in an open crate. They were very badly wilted. Putting them in water soon revived them. All lived and grew and some of them bloomed. Of course it is not necessary to keep them very dry. They can be kept on a rack with cannas and dahlias.

When you fill orders with them you can put them in rather wet moss and sprinkle them with a little water, and when they reach their destination they will be in a plump and healthy condition.

This plant is very remarkable for its hardiness. One fall a dealer had a rush order. The purchaser must have the roots at the earliest possible date. Gathering together, he covered them heavily, but the night was cold, and in the morning they were hard as cobble stones. He picked out the hardest ones to keep at home for testing and then packed the rest in moss and sent them on. Examining his own he found them perfect, and he was praised for the fine condition in which they were received. What other plant could stand such usage? These can be sent any time in the winter, if well packed, with perfect safety.

CHAPTER XV

Leading Varieties

We have been at great pains to unravel the tangle, and if possible secure the name which properly belongs to the variety.

We shall not give a long list. We wish to give those that have been satisfactory. There are many new ones of merit that have recently been produced, but they are so scarce and high they are not available. So we omit them. Some are not hardy. They are nipped in the bud by late frosts and do not bloom annually. Many are slow propagators.

At much pains we have secured the French and Holland lists, together with the English and American, and have culled out those that do the best both east and west. Tastes differ, and some will

think their favorites are overlooked, but we cannot give the two thousand named sorts. We can only name those which seem the best.

Achille. Calot 1855. Delicate flesh, fading to white; early and fragrant. This has been sent out innocently by many firms as Marie Lemoine. A fine variety.

Agida. Holland list. Rosy violet; early.

Anna Swanson. Terry. Rosy crimson; robust.

Alba Mutabilis. Guerin, 1850. Flesh and white.

Alba Sulphurea. Calot, 1860. White guard petals; center sulphur yellow; early; good bloomer.

Agnes Mary Kelway. Kelway. Light rose guard petals; yellow petaloids, with tuft in center. A nice, delicate little flower; not very vigorous.

Alexander Dumas. Guerin, 1862. Brilliant pink, very lively, interspersed with chamois, white and salmon; medium. A fine, robust plant; good stem. Scores the five points of excellence. Splendid east and west.

Alice Crousse. Calot, 1872. Very pretty, anemone shape; bright pink; center salmon, pink and white. Extra fine.

Amazone. Lemoine, 1899. This belongs to the coterie of new French peonies of exquisite grace and beauty. Creamy white, yellowish center; guard petals striated with carmine. Entirely distinct from the Amazon.

Ambroise Verchaffelt. Parmentier, 1850. Deep lilac crimson.

Ambroise Verchaffelt. Calot, 1868. Described by Ward: Deep purplish crimson; large, cup-shaped bloom; late. Fine for landscape work. Good for cut flowers. Not a success in the west.

Andre Laures. Crousse, 1881. Full flowers, violet red; stout stems; very late. This is almost identical with Fragrans, Fragrant Rose and Late Rose, as grown by most dealers. This class is the most numerous and the cheapest of the whole family.

Asa Gray. Crousse, 1886. Large, full bloom, imbricated, rosiform, perfect shape; guard petals salmon flesh, inner petals pink, sprinkled with carmine lilac. Superb.

Auguste Lemonier. Calot, 1865. Large, deep, dark red; velvety finish.

Avalanche. Crousse, 1886. Convex, imbricated bloom; fine, creamy center, with stripes of carmine of rare delicacy and beauty.

Baronne James de Rothschild. Guerin, 1850. Bright, silvery pink, center sometimes purplish pink.

Baroness Schroeder. Origin unknown. Sent out by Kelway. Taken all around, this is one of the finest in existence. You may pick three flowers and one of them will have a delicate and lingering reflex of gold in the center. The next may have a creamy center, and the next a pinkish glow. The whole flower delicate, baby pink, fading to purest white. It is well formed and ethereally beautiful. The first sent out by Kelway were genuine, and there are quite a number in America. When the demand grew Kelway appears to have sent out three different sorts under that name, and

some French dealers have also sent some spurious ones. This scores all the points of excellence. It is a prolific bloomer, deliciously fragrant, and a remarkably rapid multiplier. We have cut four fine roots from one in a single year. It sells readily at $5.00 a root, and is a fine investment at that.

Bell Hough. Terry, 1900. Large, light purplish crimson; very robust plant and fine flower. Late.

Bertha. Terry, 1898. Bright crimson, large, full double; late. Very satisfactory.

Beauty Francaise. Guerin, 1850. Delicate flesh pink, spotted with purplish white and carmine.

Belle Chatelaine. Guerin, 1861. Large bloom, soft pink with sulphur reflex; center carmine.

Bicolor. Lemon, 1835. Clear flesh color, yellow center, purple anthers.

Bicolor. Guerin, 1840. Clear flesh color, yellow center, stamens bordered purple, white tuft. Vigorous plant; fine flower. Fine in the west. Very satisfactory.

Boule de Neige. Calot, 1867. White, tinged yellow; center bordered with carmine.

Bossuet. Miellez, 1858. Large blooms; brilliant, lively violet.

Cameron. Crousse, 1879. Very large, imbricated blooms; deep purple red with velvety tints.

Candidessima. Calot, 1856. Creamy white and clear sulphur yellow.

Carnea Elegans. Guerin, 1850. Bright, clear, flesh color; perfect shape, glossy reflex. A superb flower every other year.

Carnea Flora Plena. Guerin, 1850. Delicate flesh, carmine center.

Carnation. Terry, 1890. Solid, light crimson; broad outer petals, inside fringed. Late. Very satisfactory.

Charles Verdier. Unknown. Large, lilac carmine flower; slate color reflex. Vigorous plant.

Chrysanthemefolia. Guerin, 1852. Ivory white, center yellow and white, with lemon yellow background.

Charlemagne. Crousse, 1880. Large, compact, creamy white; center slightly lilac, fading to white. The flower is cup-shaped, liable to be filled with water when it rains, which rots the bloom. Should be covered with muslin while blooming. A splendid, solid flower when perfect, but without extra care it is seldom satisfactory. It is also late and liable to sun scald.

Comte de Diesbach. Calot, 1873. Purplish blooms, early and fine.

Comtesse de Montalivet. Guerin, 1861. Light flesh, changing to pure white, with blood drops in the center; large, fine flower; extremely beautiful. Very satisfactory.

Comte de Nanteuil. Calot, 1858. Large, full flower; pink salmon tint.

Comte de Osmont. Calot, 1856. Fine, large, white, with sulphur center. Very fine.

Constant Devred. Calot, 1868. Bright, glossy purple, with chatoyant, variable reflex.

Coronation. Kelway, 1900. Large; light pink at the edges, rest creamy flesh of delicate shade. Fairly successful in the west. Rather shy bloomer.

Couronne de Or. Calot, 1873. A well packed, solid flower; white, with yellow reflection; center petals touched with carmine. Very fine. Scores the five points.

Crimson Queen. Terry, 1890. Solid, clear, light crimson; finely fringed. Strong plant and choice flower. Very satisfactory.

Cynthia. Terry, 1898. Charming, light rose, fading to white, reminding one of Agnes Mary Kelway, which it surpasses in beauty and vigor, as grown in Nebraska. A flower with a future.

De Candolle. Crousse, 1880. Bright currant amaranth; admirable variety.

De Candolle. Verdier, 1860. Deep lilac.

Delachei. Delache, 1856. Rather late; deep purple crimson, one of the finest of dark ones.

Defiance. Terry, 1890. Immense; semi-double; bright crimson; tall and fine; golden stamens.

Delicatissima. Holland list. By some considered identical with Floral Treasure. This is a mistake. Delicatissima has been grown many years. Floral Treasure is of recent introduction by Rosenfield. He never had a Delicatissima on his place, never heard of that variety till years after the introduction of Floral Treasure. They may bear some resemblance, but they are not identical. Plant them side by side and note the difference. Delicatissima is described as soft rose.

Dorchester. Richardson, 1870. Light, clear pink; creamy center; sweet-scented; perfectly double. This was sent to England, where it sells at a high price.

Duc de Wellington. Calot, 1859. Described by Ward: Very large, well-formed, sulphur white bloom; habit ideal; stems very firm and long; strong grower; very fragrant. The genuine are scarce. Several varieties are sold under this name.

Duc Decazes. Holland list. Carmine rose, sulphur center.

Duchesse de Nemours. Calot, 1856. Fine, cup-shape bloom, sulphur white with greenish reflex; long, firm stems; strong grower, and very fragrant. In great demand.

Duchesse de Nemours. Guerin, 1840. Bright, clear, violaceous pink, with lilac tints in the center. Very large bloom. Very fragrant. One of the earliest to flower. Fine keeper and shipper. Usually on hand for Decoration Day. It is generally claimed that this and L'Esperence, of Paillet, are identical.

Duchesse d' Orleans. Guerin, 1846. Very pretty, deep pink, with violaceous tints on center petals interspersed with salmon.

Duke of Devonshire Kelway. Large, deep red; one of the finest. Very brilliant and striking.

Edouard Andre. Mechin, 1874. Large, globular bloom, deep crimson red; metallic reflex, yellow stamens. Very fine.

Edulis Superba. Lemon, 1824. Fine, shell pink. Noted for ready cleavage of the roots. A good multiplier.

Emil Lemoine. Calot, 1866. Symmetrical, purplish red flower, with reflex.

Emilie. Verdier, 1861. Soft lilac center, intermixed with narrow white petals.

Emperor Nicholas. Crousse, 1897. Enormous, broad-petaled flower, with tufted center; brilliant chatoyant or changeable amaranth, with deep purple reflex. Very brilliant.

Emperor of Russia. Kelway, 1890. Large, deep purple crimson.

Etta. Terry, 1895. Very large, late, fragrant; light flesh, fading to white. One of the best late ones. Plant robust; good, strong stem; very profuse bloomer.

Etendard du Grand Homme. Miellez, 1855. Superb, violet amaranth.

Euphemia. Terry, 1890. Very strong grower; large, flesh-colored flower with sprinkling of crimson.

Excelsior. Terry. Dark crimson, full double, early bloomer. Superior flower.

Fairy Queen. Terry. Broad outside petals, inside fringed; bright purplish crimson. Early bloomer.

Faubert. Parmentier, 1850. Deep purplish red.

Faust. Miellez, 1855. Tender, lilaceous flesh color; clear, chamois center. Extra fine.

Felix Crousse. Crousse, 1881. Large, anemone, ball-shaped bloom; brilliant red; ruby, flame-colored center. Variety of special merit.

Festiva. Donkelaer, 1838. An old sort. Fine, white center spotted with red.

Festiva Maxima. Miellez, 1851. In some respects this is yet a peerless flower—queen of the whites. Though introduced 56 years ago it is almost impossible to supply the demand. Someone remarked at the great Boston show of 1906, that if this flower was of a recent introduction it would be readily sold at $5 a root. It stood well to the front with all the new and beautiful candidates for popular favor. It is an immense white flower with drops of carmine sprinkled in the center. It is an early bloomer and a good keeper, dying gracefully.

Floral Treasure. Rosenfield. First bloomed in 1890; put on the market in 1900. Flower fine, large pink; very fragrant. Took the prize as best pink at the Chicago show, 1905. It has steadily advanced to the front as one of the best. It is very hardy, blooming profusely after being frozen solid 48 hours, when two feet tall. It is a success both east and west, and is well fitted by its hardiness for Manitoba and the great northwest. Some claim it is identical with Delicatissima. This is absolutely impossible. See description of that variety. Plant them side by side, watch them closely and note the difference. Among 2,000 kinds there may be a similarity, but there will be some variation.

Flambeau. Crousse, 1897. Very floriferous variety, with large, tufted bloom; very broad, cherry petals, with silvery white tips of delicate shading.

Formosa Alba. Lemon, 1830. An old variety, yet somewhat a favorite. White and sulphur flower.

Francoise Ortegat. Parmentier, 1850. In some catalogues Francoise Ortegal. An old favorite; purplish crimson, with golden center. Good east and west.

Fragrans. This does not appear in the French or Holland lists. Described by Kelway as light purple; by Peterson as light rose and one of the first to bloom. By others it is called late rose and red. The name seems to be applied to five or six different sorts. Peterson's description is probably correct. It is easy to apply this name to any fragrant sort.

Fulgida. Parmentier, 1850. Violaceous purple. Rather early.

General Bertrand. Guerin, 1846. An old variety, yet popular. Violaceous pink, with salmon center.

General Cavaignac. Calot, 1858. Bright, lilac pink; shaded deeper pink.

General Grant. Terry, 1890. Splendid, deep red; large flower; unfortunately with too weak a stem to hold up the great burden.

Gloire de Chenonceaux. Mechin, 1880. Large, currant red blooms; border of petals silvery white. A late variety.

Gloire de Charles Gombault. Introduced by A. Dessert, 1896. Large, globular flowers, extra full; deep, fleshy pink collar; center petals narrower; salmoned, clear, fleshy color, shaded apricot, with tuft of broad petals, pink, striped red, multicolor with vivid freshness. There is but little use in naming A. Dessert's newest introductions. There is such a demand for them but few can obtain them.

Gloire de Douai. Calot, 1860. Purplish, scarlet crimson, with dark reflex.

Glory of Somerset. Kelway, 1900. Soft, large pink. Shy bloomer in the west.

Grandiflora Carnea Plena. Lemon, 1824. An old and very fine variety; blooms are variegated; fine keepers. Like Seven Sister roses, they change color, and in the row there will appear to be several kinds. Clear, flesh pink, shaded lilac; free bloomer. Fine as cut flower, excellent for landscape work.

Golden Harvest. Rosenfield. First bloomed in 1890. Put on the market in 1900. It lacks only a long, strong stem of being one of the very finest. Outer petals pink, inner golden; raised center, and in the midst when fully developed, a dainty Festiva Maxima in miniature, carmine dots and all. It is one of the very hardiest and blooms on the least provocation. Favorable reports come from Minnesota, the Dakotas and even Manitoba. Everywhere it is a favorite. When almost ready to bloom, a terrible frost nipped most kinds in the bud and killed some tender sorts. This covered itself with such a gorgeous mantle of bloom you could hardly see

the ground. It is very floriferous. Sure, annual bloomer. Multiplies rapidly and stands far ahead of most of the imported ones. Some claim this is Jennie d' Arc. They are entirely distinct, though bearing faint resemblance.

Golden Wedding. Mrs. Pleas, 1900. This is the only purely yellow peony we know of. It is not a large flower,; semi-double, and is not a long keeper, but it is solid yellow.

Walter Morgan, by the same propagator, comes next. It is very nearly pure yellow. These, perhaps, have not so much merit in themselves, though they are fine flowers; but we have great hopes of their progeny. We have raised quite a number of seedlings from them, and hope for the best of results, as all wish to see a grand, full double, yellow peony. These are rare and high, probably not over fifty in existence.

Grandiflora Nivea Plena. Lemon, 1824, Pure white, sometimes with stripes of carmine on center petals. A fine old sort.

Grandiflora. Richardson. Very late; immense flesh, fading to White. Grand.

Grandiflora Rubra. This has no place, yet the name is often used. It does not appear in English, French or Holland catalogues. It is absolutely identical with Marechal Vaillant, as compared in several places, and should always go by that name. Some of the importations probably lost their names and they were given this by some American grower.

Grandiflora Rosea. Guerin. 1850. Even, clear pink. Much like Zoe Calot, only larger. Very fine; floriferous, early bloomer.

Grover Cleveland. Tecumseh. Terry. Very solid, dark red; rather late; splendid keeper. Called by some growers best of all the deep reds. Somewhat variable different years.

Henri Murger. Crousse, 1895. Large, globular, imbricated flowers, with broad petals; shape and color of Paul Neyron Rose, deeper center. Very fine variety. Late.

Henri Demay. Calot, 1866, Violaceous purple, with silvery reflex. Superb flower, hardy and floriferous. Fine both east and west.

Humei. Anderson. Enormous, varnished pink, cinnamon scented. One of the grandest when at its best. Somewhat variable different years. Very late.

Humei Carnea. Guerin, 1856. Clear pink.

Irma. Calot, 1859. Very soft, fleshy pink. Very satisfactory in the west.

James Blanc. Crousse, 1883. Mid-season. Medium bloom. Bright china pink; dwarf habit, according to Ward. Fine for landscape work.

John Richardson. Richardson. Blush rose; extra fine.

Jennie d' Arc. Calot, 1858. Soft pink, sulphur white and rose; raised center dashed with carmine. Something like Golden Harvest, but with ranker foliage and not as floriferous.

Jules Calot. Calot, 1861. Carmined pink, shaded white.

Jules Lebon. Calot, 1866. Late. Bright, deep pink, with bright reflex.

Jupiter. Calot, 1867. Deep purple.

Jupiter. Terry, 1890. Large, full double; light rose. Early bloomer.

Labolas. Kelway. Purple rose; short petals, tipped yellow.

Lady Alexandra Duff. Kelway's myth. We give place to one of our foremost eastern growers:

"What I Know About Peony Lady Alexandra Duff.—In the year 1901 I sent to Kelway & Son for five plants. They flowered only imperfectly the following year, but I was afraid on account of these imperfect flowers that they were wrong. I immediately wrote them to send me five more plants in my shipment of that year. The next year, when the first five were two years old, they produced flowers of Festiva Maxima. The second lot flowered well in 1904, and I showed them at the exhibition of the Massachusetts Horticultural Society in June, and they awarded me a first-class certificate for them. At the rose show of this same society, which followed the peony show in one week, Messrs. T. C. Thurlow & Son showed a peony under that name, which they had imported from Kelway & Son, which I had on my grounds under two names—one imported from Kelway & Son in the year 1901 as Princess of Wales, and another one as James Kelway, later. I also have had the same peony from another grower in America as the James Kelway. At the last peony show William Whitman's gardener, of Brookline, Mass., showed a Duchesse de Nemours (Calot) under the name of Lady Alexandra Duff, imported direct from Kelway & Son. To sum it up, we have first Festiva Maxima; second, Grandiflora Nivea, an old variety of 1825—for this is the second variety which I received and which was awarded the first-class certificate by the Masachusetts Horticultural Society in 1904; third, we have the one sent Thurlow & Son, which I already had as Princess of Wales and James Kelway; fourth, we have the old variety of Duchesse De Nemours (Calot) which was sent to Mr. Whitman. Here are three old varieties re-named and sent out as Lady A. Duff, and two varieties of his own growing, Princess of Wales and James Kelway, also as Lady A. Duff. All this time Kelway & Son are saying the stock is nearly exhausted, but for our money they are shipping this stuff. I am led to the conclusion that there is no such peony as Lady Alexandra Duff, or Lady A. McDuff, as it was first called. It has been, probably, a re-naming of an old French variety from the very beginning, and when one variety runs short select another and so continue the fraud. E. J. Shaylor,

Wellesley Hills, Mass. Peony Specialist."

On the supposition that this was the finest peony on earth, we sent in our money, and on comparing notes at the Boston show, we found that seven different varieties had been sent out under that name. In my own case I got an inferior, little, 10-cent, single one. Mr. Shaylor had booked several orders at $10 per root, my order

with the rest, when he found, to his satisfaction, he had no such peony.

Lady Bramwell. Unknown. Beautiful, early, glossy pink. Very fragrant and fine.

Lady Beresford. I once ordered two of Kelway, and received one cheap pink and one very inferior single. I have since seen the genuine. It is marked much like La Tulipe, but is not quite equal to it. Fine flesh, streaked with carmine. Not very robust, and seems liable to disease.

La Coquette. Guerin, 1861. Bright rose; fleshy pink center marked with carmine. A fine, robust plant, roots having a fine cleavage.

L' Avenir. Calot, 1868. Pink, gold and carmine. Fine.

La Fiancee. Dessert, 1902. Synonym Albiflora. Broad, single flowers; exceedingly floriferous; wide petals of silky and almost transparent whiteness.

La Fiancee. Lemoine, 1898. Large blooms, imbricated, creamy white; yellowish center.

La France. Lemoine, 1901. Enormous blooms; very full; soft, apple blossom pink, with mauve reflex.

Lamartine. Calot. 1860. This is probably Giganthea. Very large, pink flower. Better east than in the west.

La Reine. Terry. Delicate rose, changing to white; straw-colored center, sometimes tipped with crimson.

La Sublime. Parmentier, 1850. This has been extensively sold under the name of La Sublisse. It is a very fine, floriferous crimson. In good demand.

La Tulipe. Calot, 1873. This is one of the finest. First, a ball interlaced with green, red and light; finally it opens, a globe of softest blush, with streaks of carmine. A glorious flower. It seems to sit in a chalice of veined marble, emitting a delightful fragrance. Gradually it fades to purest white, looking something like Festiva Maxima, and like that, holds the freshness of its beauty till the petals fall. A splendid keeper.

L' Esperence. There is much discussion regarding this variety. One, perhaps the proper one, was sent out by Calot, 1865. This is called white, washed with soft pink. The one which has been raised under that name, sent out by Paillet and raised in large quantities by western growers, is a clear, beautiful, fragrant pink. The earliest of all the Chinensis family; in its full glory in most of the northern states for Decoration Day. Ward thinks it is Duchesse de Nemours (Guerin), but it does not at all correspond with the description, "clear violet, lilac center." I think we will have to let it go as it is. One of the finest and within the reach of all. One of the most profitable and satisfactory for cut flowers, on account of its earliness and rare beauty as well as sure blooming propensities. It also seems very hardy in the far north. A favorite everywhere.

Livingstone. Crousse, 1879. Very full bloom, imbricated; pretty, soft pink, washed white. Good bloomer; extra fine. One of Peterson's favorites and with good reason.

Louis Van Houtte. There are three bearing this name; one by Delache, 1854, even, bright, violaceous red; one by Parmentier, 1850, soft pink, deeper center. The one generally grown is probably from Calot, 1867. Rich color, glaring purplish pink. Very satisfactory.

La Vestale. Calot, 1870. Pure white with yellow streaks in the center.

L' Elegante. Guerin, 1857. Bright rose.

L' Emperor. Foulard, 1858. Crimson.

Lilaceana Superba. Buyck, 1842. Even lilac color.

Lutea Plenissima. Buyck, 1842. Even, sulphur yellow, changing to clear yellow. We have never seen this.

Marie. Calot, 1868. White, with chamois tints.

Marie Crousse. Crousse, 1892. Enormous, globular flower; soft flesh color, with salmon reflex in the center, with shade of exquisite freshness.

Madona. Calot, 1858. Flesh colored, with shading of pink and sulphur, ultimately white.

Marcelle Dessert. Dessert, 1899. Large bloom of symmetrical form, rounded petals: fine, glossy, creamy white, very lightly spotted lilac; with the delicate fragrance of the tea rose. A flower of remarkable beauty and delicacy. It is trying to read the descriptions of these new creations and then find there are not enough for the demand and we cannot secure them at any price.

Marechal Vaillant. Calot, 1867. Immense, purple violaceous red; late and grand. This has been sold for years under the name of Grandiflora Rubra, which name should be discarded.

Marguerite Gerard. Crousse, 1892. Very large bloom with broad petals, flat shape; delicate pink, changing to soft fleshy white; creamy center; very showy. Fine east and west.

Marie Lemoine. Calot, 1869. Very large bloom, sulphur white, shaded pink; strong stems; very late. This is a very popular variety and in great demand, yet it has its defects. The flower, like Charlemagne, is cup-shaped, which catches the rain, and is liable to rot; and in the west it is liable to sun-scald, being so late. Should be protected from heat and rain. Three kinds have been sent out under this name. The early, ivory white, really the Achille; very early. The next, sent out by Paillet, medium, a large, broad-faced, pinkish white, changing to pure white. This late one of Calot is probably the genuine one, as no other sort appears on the Dessert or Holland list.

Marie Stewart. Calot, 1856. Bright, fleshy rose and sulphur white.

Mme. Breon. Guerin, 1856. An old and popular variety. Flesh color, with white center, with a yellowish tinge.

Mme. Boulanger. Crousse, 1886. Very full, large bloom, shape of centifolia rose, with the same fragrance; pretty, soft, glossy pink, shaded lilac; silvery flesh border. Very fine.

Mme Calot. Miellez, 1856. Pinkish white, flesh-colored shading,

Mme. Camille Bancel. Crousse, 1897. Large, globular flowers, lilac pink, fine, fresh and glossy, with bright reflex, shaded salmon.

Mme. Chaumy. Calot, 1864. Globular; soft pink, much like Lady Bramwell, only larger and later. This is one of great beauty; a good keeper, but some seasons in the west it needs shading from the hot sun.

Mme. Geissler. Crousse, 1880. Gigantic bloom, imbricated, glossy, silvery pink; base of petals of a light Bengal rose color. Seems to do well everywhere.

Mme. Ducel. Mechin, 1880. Ward says this is the kind we have been raising in the west, under the name of Model d' Perfection. Mid-season, perfectly formed, bomb-shaped bloom, solid center, with a sort of frill of outside petals; color, bright, silvery pink, with salmon and silvery reflex. Splendid for cut flowers. Rather dwarfish in habit.

Mme. Barillet Deschamps. Calot, 1868. Very tender pink, bordered white, shaded with lively silver tints. All right in the west.

Mme. Emile Galle. Crousse, 1881. Large, cup-shaped, imbricated flower; soft, lilac white; center yellowish, changing to creamy shade, bordered lilac.

Mme. Emile Lemoine. Lemoine, 1899. Very full bloom, imbricated, tufted; very tender, pinkish white. This flower, exhibited by J. E. Shaylor at the Boston show of 1906, won the admiration of all for its resplendent beauty. This is yet rare and costly. Very healthy and robust on Mr. Shaylor's grounds. It was very fortunate to escape the Lemoine grounds without that disease, spoken spoken of elsewhere. This is high priced, deservedly so.

Madame Lebon. Calot, 1888. Bright cherry pink, with silvery reflex.

Mme. d' Verneville. Crousse, 1885. Very full bloom, sulphur white, broad guard petals. Very beautiful, belonging to the front rank. Considered by Terry one of the very best.

Mme. Schmidt. Calot, 1873. Soft pink, symmetrical form. Very late.

Milton Hill. Richardson, 1891. One of the most exquisitely beautiful peonies in Europe or America. Flowers large, ethereal, clear, soft pink; central petals set like a rose, perfectly double. One looking at this resplendent bloom realizes we need not go to Europe for the best. Unfortunately it is not a prolific multiplier.

Morning Star. Terry. A star in miniature. Early bloomer, color white and straw, with delicate rays radiating from the center.

Modeste Guerin. Guerin, 1845. Though an old variety it is yet difficult to supply the demand. Bright carmine, with purple center; fragrant and fine. Medium.

Mt. Blanc. Lemoine, 1899. Very full blooms, white, with creamy center. Very nearly, if not quite, identical with Solfatare, Calot, 1861. Probably a coincidence, as they were born forty years apart.

Mons. Barrall. Calot, 1866. Symmetrical, soft pink, one of the first class.

Modele de Perfection. Crousse, 1875. Enormous cup-shaped bloom, very fresh pink; marbled, bright rose, with silvery border, center intermingled with salmon; extra fine. As noted before, the bomb-shaped pink sold under this name was Mme. Ducel (Mechin, 1880).

Monsieur Dupont. Calot, 1872. Sulphur white, bordered with lively carmine at the center. Robust and floriferous.

Mons. Jules Elie. Crousse 1888. Immense, globular, full flower, imbricated rosiform; broad petals of finest, glossy, fresh pink, deeper tint at base of the petals, silvery reflex enveloping the whole bloom. Really a perfection. Unfortunately some importations of this glorious flower have the fungoid disease.

Mons. Paillet. Guerin, 1857. Light rose, fading white.

Mons. Rousalon. Guerin, 1856. Lilac pink, deep salmoned, chamoised center, lilac pink tuft, bordered with carmine.

Mutabilis. Guerin, 1840. Bright, violaceous pink, intermingled with salmon shade.

Nec Plus Ultra. Guerin, 1844. Fine, bright rose. Used to be Ne Plus Ultra. We know not why changed.

Noblessima. Miellez, 1858. Very fine, deep pink rose; a choice variety. Very satisfactory west.

Nigra. Terry, 1900. Very dark crimson, full double, late bloomer.

Neptune. Terry. Purplish rose with white stripes. Early bloomer.

Odorata. Lemon, 1830. Yellowish white, with purplish stigmas. Shy bloomer.

Paganini. Guerin, 1845. An old variety not much disseminated. Late mid-season. Immense blooms on long stems; guards lively rose; center pinkish white and yellow. Strong grower. Very striking tricolored variety.

Pottsii. Unknown. An early, popular, old sort, somewhat variable; some years semi-double and again full double. Splendid, deep purple blooms.

Portia. Kelway. Large, full-orbed flower, yellowish, fading to pure white. This is the most sensitive to heat and drought of any on our list. Tops and roots wilt badly in a hot, dry season.

Plutarch. Unknown. Varnished crimson. Extra.

Princess Beatrice. Kelway. Pink guard petals, yellow and pink short petals, raised in the center.

Princess Ellen. Terry. Flesh color, fading to white; a beautiful, robust flower, reminding one of M. Paillet. Very desirable.

Prince of Wales. Terry. Purple, edged white, fading lighter. In a collection of 100, this stood well at the front. Very vigorous.

Pulcherrima. Guerin, 1842. Violaceous pink; center pink and salmon.

Pomponia. Unknown. Very large, robust plant, with fine, large, pinkish white bloom.

Prince Imperial. Calot, 1859. Late mid-season. Very strong stem, surmounted by brilliant, purplish scarlet bloom. Fine for cut flowers and very effective in outside ornamentation. Should be in every collection.

Queen Victoria. English Horticultural Society, 1830. This is a very old sort; a fine white; an excellent keeper. Synonym Whittleyi.

Queen Victoria. Kelway. Seems to differ somewhat from the above.

Queen Victoria. Raised by Terry forty years; received from Prince. Is deep pink, straw center; very large flower. We have the three sorts to test and compare.

Reevesii. Unknown. Soft, shady pink. Very fine.

Reine Victoria. Guerin, 1845. Clear flesh color; center penciled yellow.

Richardson's Perfection. Richardson, 1869. Flowers medium size, light blush pink, lighter in the center. It is rather late, and in the west needs shading from the burning sun.

Richardson's Rubra Superba. Richardson, 1871. This, like his Grandiflora, brings up the rear of the flowering season. This is considered one of the best of all the crimsons. In cold storage it is kept a long time. At the Boston show in 1906 fifty blooms were brought from Ohio. They were a long time on the way and were somewhat wilted, but they revived and took the prize. When we can produce such flowers ourselves, we need not depend on Europe.

Rubens. Delache, 1854. Deep, brilliant red.

Rubra Triumphans. Guerin, 1840. Very early, bright purplish crimson. Often blooms single the first year.

Samuel Henshaw. Richardson, 1871. Named by Jackson. Outer petals clear rose pink, tinged with white; inner petals pink and white, intermingled; very large and of wonderful vigor. Stem nearly as large as a lady's finger, supporting the grand flower in storms and wind.

Sada Evans. Terry. Fine, large flower, outer petals broad, light pink, inside fringed; straw-colored, the whole fading to pure white.

Sarah Bernhardt. Dessert, 1895. Large blooms, guard petals of pretty pink; salmoned center. One of the first to bloom. Has a very fine bud and is much prized by florists. One of the fine, new, French sorts, yet rare and high priced.

Shabona. Harrison, 1890. When at its best, nearly four feet tall, overlooking the whole field of 400 varieties. Makes a very imposing appearance. Flowers, bright, deep red; good keepers. Requires three or four years to come to its best.

Souvenir de L' Exposition Universalle. Calot, 1867. Clear cherry, with reflex. Very rare coloring.

Sunbeam. Harrison, 1899. Delicate, silvery, glistening white. Ethereally beautiful. Fine form. Rather late.

Sulphurea. Lemon, 1830. White, shaded sulphur.

Triumph d' Nord. Miellez, 1850. Evenly colored violaceous pink.

Triumph d' Paris. Guerin, 1850. White, yellowish center, spotted purple.

Triumph de L' Exposition de Lille. Calot, 1865. Soft, fleshy pink, with white reflex.

The Amazon. Pleas, 1900. Pinkish flower of immense size; very robust and floriferous; not first-class, yet on account of its prolific blooming, vigor and hardiness, it is well adapted to the trying climate of the west and northwest.

The Nymph. Harrison, 1901. This has a pond lily fragrance. First it opens a single flower, with delicate white petals; in the center are incurved white petals sprinkled with carmine. In a few days these unfold, making a second story flower sitting in the lap of the first, surrounded by golden stamens. This is a very unique flower. It takes about a week to make its toilet.

The Bride. Terry. Outer petals baby flesh, inside straw colored; fades to white. A charming flower.

Tricolor Grandiflora. Buyck, 1843. Pink color, intermingled cream, salmon and pink.

Venus. Terry. Pale flesh, changing to white; large, full double and late.

Victor. Terry. Full double; crimson, variable in color in different seasons. Early bloomer. Very fine.

Victoria Tricolor. Van Houtte. Pink, sulphur and flesh; rather early, abundant bloomer. First year often single, growing larger and fuller as it grows older.

Victoria Modesta. Guerin, 1842. Violaceous pink guard petals; center salmon color. Rather coarse, its chief charm being its fine fragrance.

Victor Lemoine. Calot, 1866. Deep purplish carmine.

Ville de Nancy. Calot, 1872. Pronounced by a leading New England grower as by far the finest of its class. Globular, violaceous, brilliant purple. A splendor when in full bloom.

Virgo Maria. Calot, 1859. Medium sized flower, ivory white.

Zoe Calot. Miellez, 1855. Soft pink, even color. Something like genuine Grandiflora Rosea.

Review

A careful study of all the lists shows that France is far ahead of all others in originating new kinds. Some date back farther than we had supposed. Formosa (Lemoine, 1824). Formosa Alba bears the date of 1830, while many of the old favorites date back to the 40's. We note an improvement in the varieties as we come down to the present, and regret that the limitations of propagation keep many of them out of our reach. The descriptions are not full enough; sometimes only two or three words are used. Gordoni is light pink, which would fit fifty sorts. In some cases we have add-

ed more elaborate descriptions, and we are sure we have thrown some light on many varieties. It will be a Herculean task to classify and describe them all.

Single Peonies

These are beautiful in buds, when in masses. They are not so desirable as cut flowers. At night, and in cloudy and stormy weather, they fold their petals over the stamens with a sort of motherly tenderness. They are much earlier than other sorts and are generally on time for Decoration Day. For this reason they seem to be growing in favor. In producing new varieties, quite a large proportion come single, and these are often thrown away. Yet there will be some of rare beauty, and in our own experience we find many single and semi-double, for which there is a growing call, so much so that it is difficult to keep a supply.

Names of Some Single Ones

Adana. Pink and flesh, early and large.

Arios. Bright pink, semi-double.

Defiance. Terry. Bright crimson, tall and fine.

Full Moon. Harrison. Very striking. Large, crimson; strong outer petals and a full moon of golden stamens. When at its best, it is a jolly looking flower. Perfect every other year.

Wild Rose. Pleas. Fine, open-faced crimson flower, with beautiful golden cushion.

May Davidson. Harrison. Is very large, pink, striped with silver.

Pottsiana. Terry. Seedling of Pottsii. Fine crimson.

Mrs. Terry. Terry. Lilac crimson, fine flower, very floriferous.

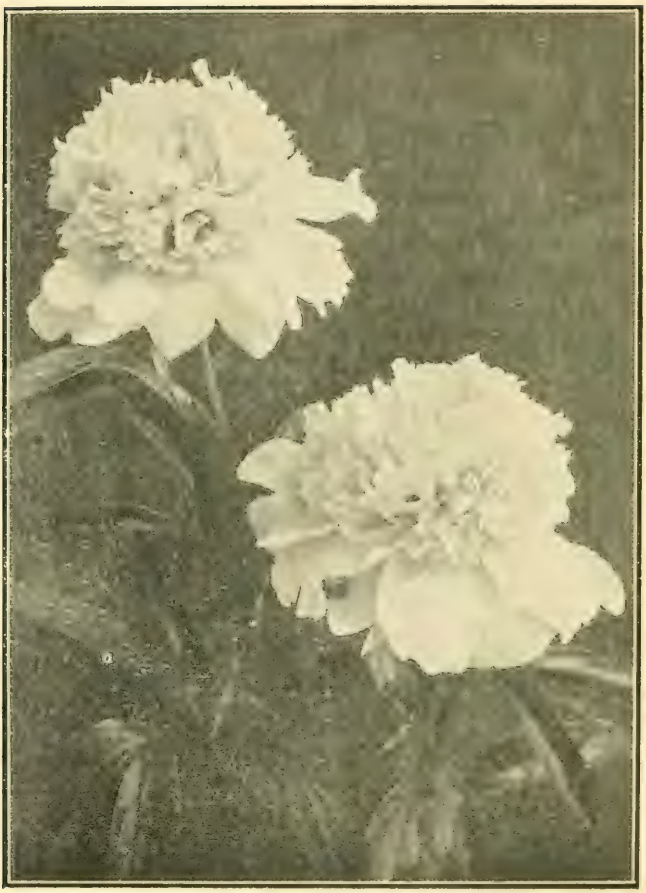
Saul. Rosenfield. Very tall stem, very large, pinkish flower. So named for its superior height.

The Queen. Terry, 1880. Snow white; very large and fine, early and fragrant.

Japanese Peonies

These are rather disappointing. We keep about thirty kinds, but they are not satisfactory. Their names are yet a jumble of confusion. They bear no comparison with the Chinensis. Their chief merit is their readiness to cross with others, and this union gives us some of rare and unique beauty, as we saw in Mr. Hollis' display at the great Boston show, and also on the grounds of others.

Peony South Weymouth.—Hollis



Mme Calot

NAMES OF SOME.

Apollo. Deep pink, shading lighter toward the edges.
Diana. Blush, with creamy white center.
Exquisite. White, with yellow stamens.
Fabiola. Delicate blush.
Neptune. A fine shell pink.
Ophir. Dark carmine.
Saturn. Rosy pink, with yellow stamens.
Souvenir. Flesh pink; creamy white center.
Titian. Soft, delicate pink.
Vesta. Purplish red.
Topaz. Deep rose, shading lighter at the margin.
Undine. Bright pink, with darker shading.

Officinalis

These are the "pinys" of our grandmothers, rather coarse, and with a rank odor.

Rubra. Early, deep crimson.
Rosea. Purplish rose.
Rosea Superba. The earliest, pure pink.
Alba (mutabilis). White. This family are earlier than the Chinensis.

Tenuifolia or Fern-Leaved

These are single and double, the earliest of all to bloom. Sometimes out the fifth of May in Nebraska.

The Moutan or Tree Peony

Does remarkably well in England and in our Atlantic States. It blooms grandly and grows to be quite a bush. I have grown them in Nebraska for more than fifteen years, and find them very shy bloomers. They will grow and increase all right, but I think the buds are sensitive to our trying climate. It is possible these will do well where the herbaceous ones are not satisfactory. I think, as you go south into the Gulf states, especially into the sandy soils, the Chinensis will not be satisfactory, and perhaps those regions will be just the place for the Moutan.

They can be used successfully for forcing, and I think this would be feasible. The trouble with those grown out doors is supposed to be the severe spring frosts. This difficulty would be obviated by bringing them into the green house. In those sections where you can depend on them, the blossoms are of resplendent beauty, some of the newer sorts almost as large as a dinner plate.

They are usually propagated by putting a slip into the fleshy root of the herbaceous kinds. It will use this for a time and then

discard it for its own. The stools can be readily separated, and if you wish to increase faster, graft the tops on their own roots much as the nurseryman does his young apple trees, using the lip or splice graft. Care must be taken, however, to let them knit well before planting out. But if you have patience you can wait for the root division.

VARIETIES.

Abokin. Bright scarlet.
Akashi-jishi. Blush-white, shading deeper center.
Daikagura. Carmine, shading to rose at edges.
Fuji-no-mone. Pure white.
Kakubanryn. Creamy white.
Iwato-kagami. Fine pink.
Kamadafuji. Soft pink.
Nishikishima. Bright, soft pink, blush margin.
Ruriban. Dark purple.
Shokikagura. Satiny-rose, shading to white on edges.
Shiro-kagura. White, suffused with pink.
Yoyo-no-nomare. Soft rose, the base of petals mottled.

A gentleman in Nebraska has remarkable success with raising flowers from these every year. He sets a barrel over the plant in the early winter, and fills it with leaves, and is in no hurry to remove the protection in the spring. The flowers were a surprise to his neighbors and he was offered three dollars a root for all he had. Perhaps if we took time to care for the sensitive sorts, and this variety also, we would be well rewarded for our pains. But among perennials we naturally expect plants will be robust enough to take care of themselves.

CHAPTER XVI

The Five Points of Excellence

A first-class peony should be: First, symmetrical and beautiful in form; second, fragrant; third, a good keeper as a flower; fourth, a prolific and ready bloomer; fifth, the plant, to be profitable, must be vigorous, and propagate readily. We have many that score well on all these points.

Mission of the Tops

It is a wise provision of Nature that the tops should fall down and shelter the roots and buds in winter. They make a good covering in the absence of other mulching. If they grow in the open the snow naturally drifts in, detained by the fallen tops, and so you

have a snow bank for additional protection, and also spring irrigation when the snow thaws. Yet in a visit to one of the finest Omaha cemeteries I found they mowed off the tops, to have the surface uniform, and to prevent the snow drifts, and the plants were blooming beautifully. This might do in our present cycle of wet seasons, but when years of consecutive drouth return, it would be better to leave the tops.

Peonies and Insects

It is said truly that these plants have the fewest insect enemies and diseases of any of our flowers. Yet complaints sometimes come in regarding ants. These often cover the bud, and sometimes, it is said, injure the flower. What is the reason for this? I once forced some peonies, and had a chance to watch them closely. I found the buds exuded small drops of purest honey. Tasting it, I could not tell the difference between it and the genuine article. After that I noted that ants and bees and all sweet-loving insects were very busy in blooming time. Perhaps it is not generally known that a field of peonies is one of the finest of all bee pastures, and for weeks the air is filled with the hum and buzz of honey gatherers. This honey is what the ants are after. They are in evidence mostly before the buds open. Sometimes they invade the flower for the nectar hidden there. The bee is busy then mixing the pollen, so that we can have a larger variety. One remedy is to have more flowers, so the insects will not concentrate on the lonely few. Those who grow them in quantities are never troubled. Another remedy is to put an old saucer at the base of your plant, with syrup mixed with a solution of arsenic. But as this is hardly fair for the bees, you had better try the first remedy.

Perhaps in time people will learn to plant in masses. Have a few choice ones, and then you can always get cheap ones that will flower, too, for $6 to $10 per hundred. Flowers need company. They are social things.

In Planting

Avoid low, wet and undrained ground or any place on which water will settle. A gentleman in Minnesota secured a fine lot of Mme. d' Verneville, of which he was proud. Though the ground was high, there happened to be a depression where these were planted. Water settled on them from a thaw, ice formed over them and they were all killed. At Brandon, Manitoba, the river rose and covered the peony bed a few days, and it killed them. One mild winter in Nebraska a grower had some on low ground, and while the ground was not frozen, snow drifted on them, and in the spring they were dead. Use a little precaution, and you are all right.

What to Plant With Peonies

After blooming, the plants have little more to do, except to attend to the root growth, and yet you want something on the ground. You can have your rows wide enough apart so as to plant other things between them. Between the two back rows delphiniums would answer, then lilies, then phloxes.

Protection from the Sun

France is rather a warm country for the peony, and it is necessary to protect some varieties. Cup-shaped flowers, like Charlemagne, of which there are quite a number, need some shelter from the heavy rains which rot the buds. Then such sorts as Perfection, Marie Lemoine and Grandiflora, would be much better if protected from the burning sun and hot south winds. It would be well to plant these sorts together and shield them en masse.

Importing

If you have a strong set of nerves and a disposition that nothing can ruffle you can try it. Order from the average Holland dealer, wait two years for the result, and then invoice your feelings. If you have nerves of steel and want to be gulled, place an order with Kelway & Son, and see them hide behind the ocean and smile. If you want to be dead sure of the genuine, send to the best propagator in Europe and have almost every root crippled with that dread disease so they will look like a poor hand terribly distorted by rheumatism in every joint. We have quit.

To Lengthen the Season of Blooming

Without any special effort we have cut flowers the 5th of May and the 5th of July the same year. Try forcing for early ones, then raising under cloth for the next, then your earliest in the open will come on, then the medium and the late. If you want them very late, take good, strong clumps, put them in cold storage and plant the first of July, and by using cold storage you can have them through August.

If you have a row of only one kind you can stretch the time of blooming considerably. Begin at the end nearest the house and put a lot of hay on the first three clumps before the ground freezes. Now wait till the earth is frozen the hardest and put some coarse manure on the row, very light at first, then increase in depth until you reach the end of the row. There you pile it on two feet deep. Now see how it will work. In the spring take off the hay you put on before the ground was frozen. Take a long box, long enough to cover those first three clumps; knock off the bottom and put on

cloth; put it on those first ones and bank up, so the air will not get under. The next will have but little mulching. You can take all off of a few of the next. Leave it on all the rest, and you will have a long succession. Remember you are not to move the mulching on the row. At the further end it is two feet deep; that holds the frost and retards the growth. You will be astonished at the succession of blooms.

Peonies in the South

While they do very well in the middle south, in Georgia and Tennessee, they do not seem to be so successful in the gulf states. We understand they do not do well in California, the land of flowers. They do better in the north. California and the south are flower lands. You do not find so many in the north. For this reason they may well be welcomed.

A writer in Florists' Exchange asks if it is practical to grow peonies in the south, and P. J. Berckmans, of Georgia, gives his experience for the central southern states:

"We have found from past experience that peonies, to succeed well, should be planted in the south as early after the middle of October as practicable. Plants set out later than February seldom give as good results as those which are planted earlier. The best soil is one that is deep and loamy. It is best to prepare the soil of the bed by trenching, and mix in a liberal supply of decomposed cow manure. Some varieties give larger and more flowers when planted on the northwest side of a building, where they have partial shade, although many varieties give excellent results in open sun. The main thing is to keep the plants abundantly supplied with water during the blooming period. After a killing frost the bed should be top dressed with decomposed stable manure and, in planting, set the crowns from three to four inches below the surface and remove all roots that might be injured. All that is required for after-cultivation is to keep the beds free from weeds and give them a fall dressing of manure. The varieties that have given the best results with us are as follows: Queen Emma, Pulcherrima, Agida, Argus, Andre Lauries, Buckii, Duke of Wellington, Eclatante, Elegantissima, Festiva Maxima, Marie Lemoine, Miranda, Psyche, Purpurea, Queen Victoria, Rubra Triumphans, Victor Moorish and the varieties of the officinalis class for early blooming.

P. J. Berckmans."

Keeping Varieties Separate and Unmixed

Where one has four or five hundred kinds this is a difficult matter. Some use almost any kind of a stake, with name carefully written on a painted label, which is wired on the stake. We use pine stakes sawed from inch boards. These are one and a half inches wide and two feet long, painted zinc white, and that is much more durable than lead, which has a tendency to chalk off. The

name should be written very distinctly. Then take a light brush and spread a little boiled oil over it, for an ordinary marking can last only a year or so, when it becomes dim, or the weather wears it off entirely. The greatest care is needed. Sometimes an admiring friend comes along and pulls up a stake to read the name and sets it down wrong side to, and so gets things badly mixed. W. A. Peterson, of Chicago, has a good system. He is discarding many common sorts and paying attention to the best varieties. Everything is carefully marked in the field, and then the whole planting is platted. Each variety is set down, and the exact distance from one stake to another is noted, so if the stakes should be moved, maliciously or otherwise, there would be an exact record. In some localities there is a strange mixture, half devil and half man, which makes a vicious combination. Often a boy or man thus constituted will deem it a great joke to pull stakes and throw them away, or change the stakes. By careful platting such maliciousness is thwarted. Then in blooming time the plants should be carefully watched and the strays or rogues staked, so as to be removed in the fall. There is usually such a variety and diversity in form and foliage that one can detect any strays which might creep in from the leaves alone. For instance, Festiva Maxima has very large leaves and is of a robust habit, while Grandiflora Carnea Plena is a dwarf, with finer foliage, and one can detect a stray of either kind in a moment. The best way is to keep a patch of ground entirely to one variety; carefully watch foliage and bloom and be sure of your stock.

Should there, by any possibility, be a mistake, the dealer of course feels in duty bound to rectify it as soon as possible. We once bought 100 Pottsii Alba of a leading eastern party. They proved to be of an altogether different sort, and not worth one-fourth as much as the kind ordered. It was a great disappointment, for Pottsii Alba is among the best. We wrote to the dealer, telling him of the loss of two years' growth and the disappointment, at the same time telling him of the uncertainty and unreliability of most importations and that we knew he sold in good faith, but if he would send fifty of the kind ordered we would call it square. He wrote that he had instructed his agent in Europe to visit a firm he could rely upon, and if possible he would secure the genuine, which he did, sending on the fifty in due season.

The fact is, there is such a call for these plants they cannot be supplied at home, so dealers send abroad, Now the rare kinds are very high, and so dealers and growers will often put the name of a high priced one on a poor sort and send it on. And as it takes two or three years to test them, endless confusion arises. The importer, thinking them true to name, sells them, and finds, to his dismay, that they have been cheated all around. President Ward, in his address before the society at Boston, gives a most graphic account of the disappointments and vexations of the importer.

CHAPTER XVII

Extract from Address of President Ward at the National Peony Show, at Boston, 1906

"The necessity of continuing everlastingly at the task of straightening out the nomenclature of the peony has been most emphatically impressed upon me by my experience in purchasing peonies from both foreign and American growers during the last three years.

"In my last annual address I referred to the variety purchased under the name of Henry Murger, wherein I received two absolutely distinct peonies under this name from the same firm at different periods. This spring the attempt to determine whether the names attached to the various varieties growing in our peony test plot were the true names, developed a state of affairs which has caused me not a little chagrin, and I find that I have the same peony in many instances under several names.

"Some two years ago I purchased from one of the most reliable firms in Holland quite a quantity of a peony under the name of Mons. Charles Leveque, paying therefor an exceptionally large price, under the impression and representation that I was getting something especially good. The plants are blooming for the first time this season and prove to be nothing less than the variety sold by French growers under the name of Mlle. Leonie Calot, introduced by Calot in 1861. We have been purchasing this variety from the most responsible French and German growers, and while the peony is of a very beautiful color, it is weak in the stem and the blooms fall upon the ground, and it has little value as an effective sort in the field. The color is a beautiful shade of salmon pink, the flower is medium in size and has the merit of being a good keeper and may have some value as a cut flower variety; but if the firms who have introduced this peony under a new name, thus giving the impression that it is a new variety, have done it knowingly, they have perpetrated a fraud upon American peony buyers which will not soon be forgotten by those who have been unfortunate enough to purchase this variety at a much higher price than they could have secured it under its true name from the French and German growers.

"Two distinct sorts came to us from reputable firms under the name of Delachii, one being a deep purplish amaranth, the other much darker in color and with a decided crimson cast. The habits of both varieties are quite different and one sort is much more valuable than the other. I have not yet been able to determine which is the true sort, as either one would answer fairly well to the introducer's description of Delachii, which is "deep purple."

"From one of the most responsible American peony firms we got the variety Mme. Ducel, under the name of Model of Perfection; others have the name of Mons. Jules Elie attached to their stock of Mme. Ducel. Under Modeste Guerin come two varieties

somewhat similar in habit and color, but the true variety is much better in color and a more valuable peony than the false one.

"Mme. Coste comes to us under the name of Souvenir de L' Exposition Universelle. Under the same name we get two dark pink varieties which are far inferior to Souvenir de L' Exposition Universelle and which we have not as yet been able to identify.

"Marie Stuart comes to us from one of the most prominent western peony firms, under the name of Baroness Schroeder. Under the name or Mme. de Verneville we get a mixture of Mme. de Vatry, Jeanne d'Arc and the true Verneville. Jeanne d'Arc comes to us under the name of Marguerite Gerard; Agnes Marie Kelway came under the name of La Tulipe, and La Tulipe comes also under the name of Multicolor.

"Two common dark pink peonies come to us under the name of Mme. Camille Bancel. Under La Tendresse we get a common flesh pink semi-double peony which shows the seed pods prominently in the center. The true La Tendresse is creamy white, absolutely double and shows no center or seed pods, and is a much dwarfer grower than the false variety.

"Some three or four years since we purchased from a Holland firm quite a stock of a good, solid pink peony, under the name of Rose d'Amour. All of the stock we received from the firm the first year proved to be true to habit and color. The second order to the same firm for the same variety brought a mixed lot of pink peonies, all varying shades of dark and light pink and purple, and but eleven plants out of one hundred received proved to be the same kind sold us originally by this same firm as Rose d'Amour. An investigation of the variety, and comparing it with the true Rose d'Amour, which we purchased from a French firm and which answers to the originator's description, disclosed the fact that none of the peonies shipped to us by the Holland firm in question was the true variety.

"Many common sorts come to us under the names of well-known, valuable varieties. In some instances where a quantity of a valuable sort is purchased, one or two plants in the lot will prove true to name, the balance being frequently nothing but a lot of mixed varieties running through shades of color somewhat similar to the variety ordered, but of totally different habit and frequently a totally different period of blooming.

"In many instances where a pink variety is ordered we receive various shades of dark and light pink, white, flesh colored and even the deep purples and amaranths. In somes instances where a delicate, flesh-colored pink peony was ordered, the variety received proved upon blooming to be a deep purple.

"These experiences have been the result of my observations during the past five years while attempting to accumulate a stock of peonies true to name by purchasing them from Holland, French and German peony firms, as well as from American firms. Our plants are now three and four years old and are developing normal blooms showing the true characteristics, so that for the first time

we are able to identify the varieties in a practical way, provided the originator's description is sufficiently definite.

"In Holland they have a peony association which is endeavoring to straighten peony nomenclature by holding annual exhibitions of peony blooms and thereby settling mooted questions of nomenclature, and they have identified a number of varieties which they claim to be able to furnish true to originator's name and description. Nevertheless, in many instances when we buy of them they prove to be wrong when we get them in flower here."

Avoiding Difficulties

One cause of confusion is the lack of investigation before naming new varieties. It is somewhat annoying to be a man of prominence. For instance there are three Louis Van Houtiis, duly recorded with the names of the originators and date of introduction.

Mr. Terry named Prince of Wales when Kelway had one before him. And then to make confusion worse confounded, a prominent eastern firm, having accumulated a lot of common pink with no name, they slapped Prince of Wales on some six cent plants. We have two Admiral Dewys, and would have had more were it not for vigorous protests. We have noted three Queen Victorias, with widely distinct characteristics, and when we sell them we must designate the colors, so as to avoid confusion.

In naming new sorts we must be exceedingly careful not to duplicate. It is better to be sure that there is no other bearing the same name. For instance, we are getting quite a collection of deep reds or crimsons, and we are naming these from Indian chiefs, Shabona, Red Cloud, Red Jacket and others, taking an entirely new field. For other colors we are using the names of some of the mothers of the church, Paula, Fabiola, Marcella, St. Cecilia, etc. F. O. Brand gives what he deems the finest peony that ever saw the light the name of his wife. Mr. Hollis uses the family name also. So with a little forethought we can find labels for our new creations not used before.

This is an important matter, for there has been such an intense interest in originating new varieties, and so many hundreds are coming on, we must be extremely careful. To make the matter doubly sure it would be well to write to the secretary of the peony society, who is supposed to have a list of all varieties on the market. And don't forget to put in a dollar bill to pay for the trouble of looking the matter up. People too often think that a two cent stamp without paper or envelope entitles them to $5 worth of information. We often get letters in a busy season, when time is worth $20 a day, asking for $25 worth of information, all to be hung on that two cent stamp.

CHAPTER XVIII

Legends of the Peony

The name reaches back into the myths of history. It is said that in the days of Troy there lived a physician by the name of Paeon, who first used the roots on his patients, and these were the descendants of the Gods. So our favorite ministered to the ills of the Immortals. The name has clung ever since. It should be paeony yet. The writer hung onto the old form of spelling as long as he could, and didn't propose to change it till the old doctor changed his, but the peony society and the lexicons were against him, and so the "a" fell out in this edition.

Along in mediaeval times the peony was known as the "gallant herb of the sun." The seeds were taken at bedtime to prevent nightmare. Steeped in liquor and drank before and just after the new moon, it was a sure cure for weakness of the back. If children were sick, then a piece of root must be hung about the neck.

We well remember in the days of small boyhood the gardens were searched for "piny toes" to steep for us when we were sick. Well we recall the pungent odor of the old Officinalis. Our smelling apparatus has gone out of business and we have to borrow wife's when there is any fine work to do, but that rank smell comes down to us through the halls of memory, and for years we were prejudiced against the very name; and when a friend suggested that we should raise peonies, we rebelled and said, "Not those coarse, rank-smelling things." He replied "I guess you don't know peonies." And when we went to some of those splendid shows and saw those gorgeous blooms, the fragrance of which filled all the air, and when hundreds of admiring spectators hung with rapture over their beauty, we changed our mind. Had they been the old-fashioned sort, the odor would have been rank enough to drive people out of doors.

Peony Fragrance

This is most remarkable, on account of its wide diversity. These flowers emit their delicate perfume just as the buds open; after that it is not as pronounced. Around one there floats the perfume of the violet. The genuine Humei, besides that glorious bloom of varnished pink, sends out a cinnamon odor. Many add the perfume of the rose to the effulgent bloom. One has the delicate aroma of the heliotrope. Another has the form and fragrance of the pond lily. Let all these emanations blend in one great wave of perfume and billows of it seem to hang in the air and float around you. Some friends once drove sixteen miles to visit our grounds in blooming time, and as they came near they said the flowers could not be far off, for the very air, even at considerable distance, gave tokens of their presence.

A Field of Peonies

Is "like a sea of glory." We have traveled much and seen some beautiful things, but a field of fifty to 100,000 of these flowers transcends anything we have ever seen. It does not seem possible that so much splendor could be condensed in so small a space. Three years ago this was a patch of brown earth. Now you are reminded of that wonderful carpet captured from the Persians by the Saracens, which was a mass of gems—emeralds, rubies, amethysts, opals, pearls, sapphires, jaspers and diamonds, in one blend of transcendent beauty, only your garden is on a grander scale.

First, your ground is a foliage garden. How rich and varied the color of the plants, as they first appear. How divergent their shadings, each kind differing in foliage as well as in bloom. Now the buds appear. From them exude drops of purest honey. All the glad insects are humming and singing their delight. Now they begin to open; first the singles. You never tire of watching them. There is Terry's Queen, a massive, fragrant white. When the sun is shining all those petals open broadly to the sun. What a cushion of gold in the center. Evening comes on and those broad petals close over the delicate stamens as the mother shelters her child. Those other single ones follow suit. The splendid May Davidson, Full Moon, Defiance and others are all folding their tents for the night. Among the doubles, almost the first is L' Esperence (Duchess d' Nemours), a radiant, fragrant flower. This seems the most sympathetic of all, appearing to be anxious to be on hand for Decoration Day to aid the friends to honor their noble dead. What a profusion of bloom. Those strong plants seem covered with a mantle of beauty. The flowers are glowing, brilliant pink, large and lustrous. Not sensitive like many, grieved with an unfriendly world so they cannot show their charms, but ready every season, no matter how adverse the conditions, to give their aid to the soldiers and their friends.

And now in rapid succession others fall into line. Never brides, preparing for nuptials, pay more attention to their toilet than these. They seem dissolving the rainbow to blend its colors in these mantles of beauty. Some have golden tints; here is one cream, pink, sulphur and white; another is whiteness itself; there is one of solid pink, and there are various shadings of scarlet, red, deep red and crimson. Now look out over the field. There is one mantle of gorgeous bloom, so full you can hardly see the green or the ground, a glorious carpet woven by viewless fingers, fit to be touched with the feet of angels. It is as if a section of paradise were let down to earth as samples of the "glory to be revealed." You look on in delight. Those blossoms are the interpretation of the Divine Love, His precious thoughts translated to us. You are awed and thrilled with the honor and the glory of it. "I said ye are Gods." You also are a creator. In fields where feet of seraph do not go, you can enter. You are in partnership with unseen armies, which, day and night, are working with and for you. Had it not been for your efforts this had not been. Eliminate yourself as factor and the scene

vanishes and all reverts back to brown earth and weeds. Looking at such a transformation a man feels his power and realizes the honor which comes to him when the unseen forces salute him as king and fall into line to aid him in those marvelous creations.

This is not all. Yonder are thousands on thousands of seedlings on the way. Your hand planted the seeds. In one of those little black balls there was slumbering the form which will yet awaken the delight of the lovers of the beautiful. In such a condensed form once slumbered the resplendent Festiva Maxima, one of the richest of floral gems, of more value than any jewel dug out of earth. In another of those seeds lay Golden Harvest, in another the imperial Grandiflora, in another Rubra Superba, and you know not what surprises are in store for you as those thousands upon thousands will unfold their charms. You know that some will be as queens in the floral world, demanding the attention of the lovers of the beautiful, and your hand gathered and planted the seeds and cared for the tiny plants.

Peonies

The following is from the writings of A. Dessert, one of the most renowned and successful peony growers of Europe. We are much indebted to his carefully compiled list, which has been a great aid to us in this work:

"The peonies are perfectly hardy and so robust that they grow well in any ordinary garden soil. However, they furnish the largest and most desirable flowers when planted in good, deep-trenched ground, and in situations where the soil retains a moderate degree of dampness. If the soil be poor it should be copiously mixed with rich old manure. Cow manure is the best for all the soils which are of a light character. Manure must not come into direct contact with the roots.

"Tree peonies must be set as deeply as they were before in nursery. In setting the herbaceous peonies, the plants should be inserted with the crowns. or dormant buds, about three inches below the surface of the soil and should then be well watered.

"When planted in autumn in strong plants, peonies can produce a few flowers in the following spring, but it is only the second or third year after planting that they will produce normal flowers.

Peonies rapidly thrive, increasing in strength and beauty every year, and the third year after planting, they have already become large clumps which produce many blossoms; therefore peonies need about three feet between each plant for their development. To maintain a luxuriant vegetation, add to the soil every autumn a copious dressing of old manure.

"Peonies may be planted either in borders, groups or beds; they are always very ornamental in whatsoever way they are planted. They succeed, no matter what the situation may be, but the flowers remain fresh longer when they are in partly shaded places. When they are exposed to the full sun they can be covered with a light

cloth; the flowers thus protected acquire a really remarkable, fine color, and the flowering lasts much longer.

"Peonies are not delicate plants; however, you must avoid planting them too near voracious shrubs, the roots of which exhaust the soil. But you may plant by the peonies plants of a not cumbrous nature, the roots of which do not exhaust the soil, such as standard roses, gladioli, etc.

"Peonies do not require frequent watering, but during the seasons of extreme drought, and on light soils, copious draughts of water or liquid manure once or twice a week will assist in the formation of good, stout buds for the following season. In the spring when the buds are well formed, little side buds should be taken off when the largest blooms are desired, but when peonies are planted for the ornament of the gardens, I should advise to leave them, because these secondary flowers (which are still generally very fine) prolong the duration of flowering for some time.

"It is useful to surround the stems of herbaceous peonies with a few light ties, such as raffia fixed to a little prop to protect them from a gust of wind.

"The best time for planting peonies is September and October, as soon as the temperature is cool enough for the plants to be sent without damage. However, peonies may be planted safely at any time that the ground is in good condition, from September to March.

"Peonies carefully packed in boxes with moss are never damaged during the longest journeys, even if they are overtaken on the way by the hardest frosts. It is sufficient to put them, when arrived, in a cellar or other place of moderate temperature, during two or three days before getting the plants out of the boxes."

The Great National Peony Show of 1906 in Boston

These annual gatherings have become national events. These winsome, beautiful and attractive flowers have their devotees in all parts of the land. They gather from most of the northern states, some going 1,500 miles, and are amply repaid. Reports of the meeting are sent to all parts of the Union. Boston leads in all floral attractions. The Horticultural Society is the richest in the world. It owns a mammoth building and there is ample room for the display of the gathered tributes from the different states. Peonies are sent in by the ton. Some of the wealthy people near the city have splendid collections, often reaching into hundreds of varieties, gathered, regardless of cost, from Europe and America. Here is a physician whose fad is peonies. What a collection he has! There for the first time we saw some of Richardson's best. There was Milton Hill, which we never had seen before, and it was a case of love at first sight. Here is quite a collection from Ohio. They look faint and weary from the long journey, but they revive and

take the prize. There are many from New York and the neighboring states.

T. C. Thurlow, the prince of peony growers, is there with his wife and daughter and three enthusiastic sons. Their collection is from France, Holland and England, besides many American favorites. They carry off prizes, of course. They always do.

J. E. Shaylor is there with his marvelous collection, chief among them Mme. Emile Lemoine, a French queen of imperial beauty and radiance. He has one of the fine collections of America. President Ward is there with his favorites. Mr. Hollis is on hand with his splendid new creations. He is a magician, who has been calling forms of wondrous loveliness out of the unknown. He has many exceedingly fine ones, so many that, if all other varieties were wiped out, his family of new ones could stand as fair representatives of the whole race. His crosses between the Chinese and Japanese are very attractive and claim much attention. We are glad to know that there are now hundreds in different states at work along the same lines developing new varieties.

Here are exchanges going on. One man has very fine sorts, and another has others, and so they swap. Some are sold at high prices. And here let me say that the best varieties must go up. Mr. Hollis asks from $1 to $15 a root for his new ones, and they are worth it. Baroness Schroeder soars to $5. And why not? Scoring all the points of excellence and multiplying as rapidly as any, the original cost would be lost in a short time. What are five dollars, when you can get thirty or forty roots in four years, and $1,000 in ten years? People have been fooled so much in importing worthless sorts. They had much rather pay $5 or $10 for something they can depend on. The west may learn a lesson from the east and secure the very best, regardless of cost. They are doing this with cattle, horses and hogs, but haven't come to it yet with flowers. But they will, for there is plenty of room for growth along all lines.

Start Right

Begin with thoroughbreds instead of scrubs. The lessons of these great floral exhibitions are many. One is, those thousands of people who come to enjoy all those attractions are not fooled by fads. They are sensible, appreciative people, allured thither by real worth. Again, people learn to aspire for the best. They begin to understand the possibilities of the Home Beautiful and see how much is in store for them. They see also what they can do along the lines of new creations. Besides, there is a commendable rivalry.

Peony Growing as a Business

Young people, boys and girls, are desirous of doing something, but are deterred by lack of capital. A boy wishes to raise cattle,

and he is confronted with bills for first cost—the high price of animals, to begin with, then the cost of feed and shelter. A girl thinks she will raise poultry, but there must be ceaseless vigilance. She can't go away on a visit, and even the cost of buildings is quite an item. A poor widow wishes she might in some way lay up for a rainy day, or for old age, which she feels is creeping on; but she is without means. YET ALL CAN ENTER THIS FIELD WITH LITTLE EXPENSE, provided there is a little plat of ground which can be secured somewhere.

Get some of the best, hardy and constant bloomers. For instance, $3.00 will get a dozen L'Esperence, which sell readily and are always in demand. The same amount will get a dozen white Queen Victorias. The whites are always wanted. Six dollars will now get a dozen of those resplendent Festiva Maximas, the queen of the whites. These are very vigorous, they multiply rapidly and are always in demand. A full supply has never yet been raised. You can get a root or two of some superior sort like Avalanche, Amazone, Mm. Emile Lemoine, Mme. de Vernville, Ville d' Nancey, Plutarch or Duke of Devonshire, follow directions in this manual, dig and divide every two years, and you will be surprised to see your fortune grow. The widow can have something for old age, a life insurance secured with small cost. The girl can have something with which to commence housekeeping, and the boy will be sure of a start in life.

"Can't We Overdo the Business?"

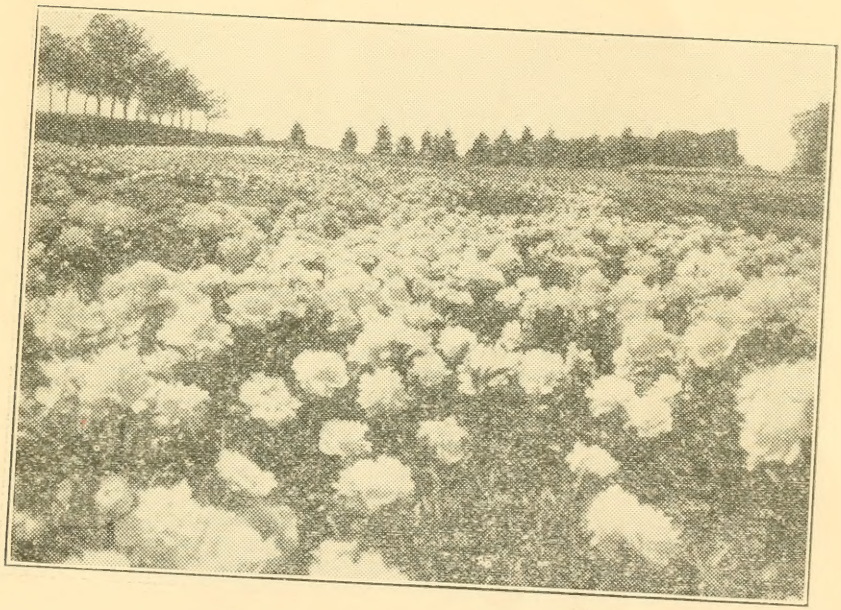
Yes, when the love of the beautiful is dead in the souls of the people, when billions on billions have been raised to fill all the empires of the west and northwest.

The love of the beautiful is growing, not dying, and when you get to raising the most charming, as well as the hardiest, flower on earth, you may be absolutely sure of success.

If you want to be gone a week, your plants will not be like chickens, dying for lack of care. All the long, cold months of winter they are independent of you. There is no enterprise which will give you such congenial employment, which will so compound interest for you on such a bountiful scale and bring in such returns for the capital invested. Be sure and begin right. Get the best kinds and give them good care and your reward is certain.

A Tribute

In the land of the North, where old Boreas reigns,
Binding rivers and fields in his terrible chains,
Where the brilliant Aurora, with fingers of light,
Is painting her splendors on garments of night;
Where the chill arms of winter our beauty enfold,
And wrap up her form in a mantle of cold,
She wakes from her slumbers and springs to the light,
And welcomes the warmth with her countenance bright.
How winsome her beauty! She floods all the air
With billows of fragrance, delicious and rare.
Away in the Southland, the land of the sun,
And out on the plains where the wild tempests run,
She blooms in her beauty, revealing her worth,
Then hides from the heat in the sheltering earth.
Where the fair Rhododendrons in radiance glow,
And their wonderful glory of loveliness show;
And Azalias are robed in their princely attire,
All aflame in their vestments of crimson and fire;
There her fragrance and graces our senses allure.
Full as lovely in form, and in beauty as pure,
By the side of the rose in her robes of the morning,
And graces exquisite her beauty adorning;
To whose fairy sweetness will ever belong
The legends of story, and tributes of song.
She need never hide in confusion and shame,
Or cringe at the thought of the magical name.
The pond lily flings all her sweets on the air,
And opens before us a countenance fair,
But the queen of our love is as dear to the eye
As the delicate blooms which on still waters lie.
In the great prairie empire, so dreary and vast,
Where roses are slain by the terrible blast,
Where sirocco and blizzard in tournament vie,
And flowers of the Eastland grow homesick and die;
Where gardens are lonely and homes are forlorn,
There bravely our queen lifts her beautiful form
And laughs at the tempest and smiles at the storm.
And mothers whose eyes have grown weary with waiting,
And girls whose sweet spirits for beauty are aching,
Shall smile on the march of our glorious flower,
And souls that are hungry her beauty devour.
No more shall the homestead be sad and forlorn,
An invasion of beauty the land shall adorn.
How sweetly her blossoms the senses beguile,
And the weary revive with the breath of her smile.



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